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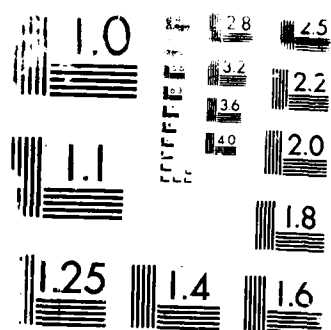
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MARINE CORPS MILITARY PAY SYSTEM

by

Danny Allan Jenkins

December 1987

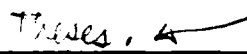
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An Analysis of Effectiveness Measurement
in the
Marine Corps Military Pay System

by

Danny Allan Jenkins
Major, United States Marine Corps
B.A., Ohio University, 1975

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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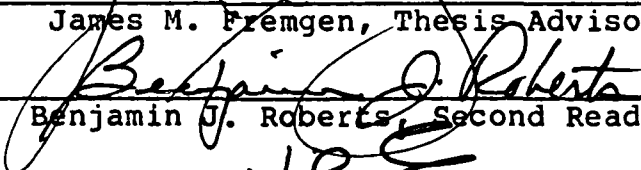
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ABSTRACT

This thesis is an analysis of the methods used by top-level Marine Corps financial management to measure the effectiveness of the active duty military pay system. Specific characteristics of measurement quality, usefulness, and motivational capability are discussed. Current measures used to monitor effectiveness are described, including those of the Marine Corps Disbursing On-Site Examination Teams and the Disbursing Performance Standards Program. These measures are then analyzed in relation to the specific measurement characteristics. The thesis concludes that the current measurement process does not appear to provide adequate information to monitor pay system effectiveness appropriately. Recommendations to improve the measurement system include reporting more information on the accuracy and timeliness of the pay system as a whole (as opposed to that of individual commands), placing more emphasis on measuring and reporting pay-related administrative performance, and reporting more information relevant to the effectiveness of the automated portion of the system (the computer).

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I. INTRODUCTION

A. BACKGROUND

The Marine Corps active duty military pay system began operating in 1973. A General Accounting Office audit report in 1980 stated that a significant weakness of the system was management's failure to establish adequate effectiveness measurement procedures: "a means to adequately measure system effectiveness has never been established, and management has lacked information showing the action needed to correct many system problems" [Ref. 1].

Many improvements have been made to the pay system since 1980, but the overall system is still deficient in satisfying user information needs [Ref. 2]. The lack of an adequate effectiveness measurement system contributes to this deficiency. Senior financial management officials at Headquarters, U.S. Marine Corps (HQMC) in Washington, D.C. and at the Marine Corps Finance Center (MCFC) in Kansas City, Missouri use various methods and reports to gauge the effectiveness of the system; taken together, these may or may not provide sufficient information to assess the overall quality and effectiveness of the function of paying Marines. An evaluation of these procedures could help justify the

adequacy of the current measurement system or point the way to improve the system so that management can adequately monitor pay system performance.

B. OBJECTIVE

Effectiveness has been defined as "the extent to which actual output corresponds to the organization's goals and objectives" [Ref. 3, pg. 467]. In other words, effectiveness means the ability to accomplish a goal. It is not the same as efficiency, which is "the ability to produce a desired effect with the least effort or waste" [Ref. 4]. To illustrate the difference, a system can be efficient if all segments of the system do what they are designed to do using the least amount of resources -- what it does, it does well. But to be effective, the system must be designed to do the tasks necessary to achieve its goals -- to do the "right" things. The system can be 100% efficient in what it is doing, but it is not effective unless its goals are being met.

The objective of this thesis is to evaluate the methods used by top-level Marine Corps financial management to measure the effectiveness of the active duty military pay system. Measuring effectiveness involves determining the extent to which the system meets its goals. Although the pay system has many objectives, the major goals of concern to the senior financial manager in the Marine Corps are accuracy and

timeliness [Ref. 5]. These two goals are in keeping with the official purpose of the Marine Corps disbursing system: to "provide prompt, convenient, and accurate disbursing service..." [Ref. 6]. This thesis, then, will focus on the methods being used to determine if the pay system provides accurate and timely payments.

C. THE MARINE CORPS MILITARY PAY SYSTEM

The Fiscal Director of the Marine Corps (FDMC) manages the function of paying military personnel in the Marine Corps. The FDMC is responsible for issuing policies and procedures governing the military pay system and is assisted (1) in policy matters by his staff in the Fiscal Division (FD) at HQMC and (2) in procedural matters by the MCFC. The pay system itself comprises not only the automated computer system (the Joint Uniform Military Pay System/Manpower Management System, or JUMPS/MMS) but also the people operating the system and the procedures they use. The accuracy and timeliness of payments depends on the effectiveness of these three parts of the overall pay system.

1. People

The people who design, operate, audit, and manage the overall pay system are members of a vast network of organizations throughout the Marine Corps. Policy guidance is provided by the FDMC and FD. Procedural instructions and management of JUMPS/MMS are provided by the MCFC. Pay

related information is reported into the system by 23 disbursing offices (DOs) and by over 1200 administrative offices at Marine Corps installations all over the world. The 23 DOs pay 200,000 Marines twice a month based on the data in the pay system. They rely on the accuracy of the system and the effectiveness of its internal controls to ensure the payments they make are proper.

Much is done to provide reasonable assurance that the payment data provided by the system are accurate. Information is manually audited before a pay entitlement or an event leading to an entitlement is reported into the system. JUMPS/MMS produces reports listing inconsistent conditions in pay accounts; these conditions indicate mistakes in the information which has been input. These reports must be reviewed and corrective action taken. Marine Corps Disbursing On-Site Examination Teams (MCDOSSET), MCFC, and local administrative assistance teams and DO quality assurance sections perform periodic audits of pay and personnel records. These audits provide reasonable assurance that payment data are accurate or identify error trends so they can be corrected.

2. Procedures

Many regulations and procedural manuals govern the operation of the pay system. Laws and Department of Defense (DOD) regulations authorize military pay entitlements and the conditions under which they may be paid. Various Marine

Corps directives prescribe policies and procedures for administering these entitlements and for operating JUMPS/MMS. Individual commands issue local instructions. Taken as a whole, these regulations and procedures publish all the requirements for paying Marines and constitute an integral part of the overall military pay system.

Procedures must be properly followed to provide accurate and timely payments. Formal schools teach pay entitlements and procedural requirements. DO quality assurance sections and local administrative assistance teams review and report to commanding and disbursing officers the effectiveness of office procedures and provide refresher training to disbursing and administrative personnel. One function of MCDOSSET during their examination of each DO and administrative office is to review internal control measures and operating procedures and recommend ways to increase their effectiveness. This review provides reasonable assurance that the procedures used comply with applicable Marine Corps directives, or it identifies problem areas which need to be strengthened.

3. JUMPS/MMS

This automated computer system contains both pay and manpower management information. The pay system "part" of JUMPS/MMS is managed by the MCFC. Pay-related information is electronically transmitted from administrative and disbursing offices to the main computer in Kansas City, where it is

processed to compute pay entitlements, allowances, withholding taxes, and other items necessary to determine how much is due on payday. Specific payment amounts are then transmitted to DOs or directly to a Marine's financial institution in time for designated paydays. Although subsidiary personal financial records (PFRs) are maintained by field DOs, over 99% of regular payday payments are based solely on the official automated record.

JUMPS/MMS is continually being updated to improve efficiency and to comply with changes in laws and regulations governing military pay. Although system modifications are tested before implementation, mistakes in design and programming occur because of the complexities of the computer programs and time constraints dictated by regulatory and legislative deadlines. Marine Corps policy makes DOs responsible for identifying system deficiencies [Ref. 7]. DOs audit a 5% random sample of PFRs each month to determine if the computer is functioning properly. Design and programming errors can thereby be identified, reported to the MCFC, and corrected. MCFC provides each DO and administrative unit with listings of all known computer system deficiencies and instructions to overcome them until they can be corrected.

D. THE RESEARCH QUESTION

The primary question this thesis attempts to answer is "Do current measurement techniques provide top-level Marine

Corps financial management officials with sufficient information to adequately monitor pay system effectiveness?"

Several subsidiary questions must also be answered:

1. What considerations are relevant in selecting measurements to be used to determine effectiveness?
2. What are the pay system goals, and how does the Marine Corps define "effectiveness" in relation to these goals?
3. How is the effectiveness of the pay system currently being measured?
4. What are the deficiencies, if any, in the current effectiveness measurement system?
5. What recommendations can be made to correct the deficiencies and improve the system?

E. SCOPE

The main thrust of this thesis is an evaluation of the methods used by the FDMC and his staff in FD to monitor overall pay system effectiveness. It includes information generated by the MCFC and MCDOSSET. The thesis is an evaluation of effectiveness measurement, not of effectiveness itself. No attempt has been made to determine whether or not the pay system is actually effective. The study does not include methods used by commanding and disbursing officers at individual Marine Corps commands to measure the effectiveness of their part of the overall system, nor does it attempt to evaluate the measurement of the efficiency of the system.

F. METHODOLOGY

The research was conducted by reviewing pertinent literature on measurement techniques to determine appropriate criteria to be considered in designing a measurement system. These criteria were later used to evaluate the effectiveness measurements used for the pay system.

Interviews with managers at FD and the MCFC and an extensive analysis of Marine Corps directives and reports were used to identify pay system goals and the procedures now used to measure effectiveness. These procedures were then evaluated to determine how adequately they measure effectiveness in relation to those goals. Reports listing current system deficiencies were also used as a basis for evaluating the measurement techniques. Deficiencies in the measurement system were identified, and recommendations for improvement have been made.

Interviews were conducted at the MCFC on 27 and 28 August 1987 and at HQMC on 14 September 1987. The following officials were interviewed:

- Mr. E. T. Comstock, FDMC
- Col. G. K. Robinson, Jr., Deputy FDMC
- Lt. Col. A. A. Quebodeaux, Assistant Head, Accounting and Finance Branch, FD (FDF)
- Mr. P. J. Canzano, Head, Finance Section, FDF
- Capt. D. D. Leshchyshyn, Head, Operations Unit, Finance Section, FDF
- Mr. A. G. Emery, Director, Directorate for Management Effectiveness and Systems Performance (DMESP), MCFC

- Mr. F. C. D. Lucas, Head, Statistical Analysis Office, DMESP, MCFC
- Mr. S. E. Turner, Director, Directorate of Automated Pay Systems (DAPS), MCFC
- Ms. P. A. Hudson, Head, Design Branch, DAPS, MCFC
- Mr. J. R. Pippin, Head, Procedures Branch, DAPS, MCFC

G. ABBREVIATIONS

Several abbreviations are used extensively throughout this thesis. Table 1 contains a list of these abbreviations.

TABLE 1

LIST OF ABBREVIATIONS

DO	Disbursing Office
DSSN	Disbursing Station Symbol Number
FD	Fiscal Division, Headquarters, U.S. Marine Corps
FDMC	Fiscal Director of the Marine Corps
HQMC	Headquarters, U.S. Marine Corps
JUMPS/MMS	Joint Uniform Military Pay System/ Manpower Management System
LES	Leave and Earnings Statement
MCDOSET	Marine Corps Disbursing On-Site Examination Teams
MCFC	Marine Corps Finance Center
MMPA	Master Military Pay Account
PAE	Project Analysis/Evaluation form
PFR	Personal Financial Record
SAO	System Assurance Officer

H. SUMMARY OF FINDINGS

The measurement and reporting processes currently in place do not appear to provide adequate information to monitor pay system effectiveness appropriately. The performance of DOs in contributing to pay system effectiveness is measured more thoroughly than that of either administrative offices or the computer. Since administrative offices, not DOs, are now determining and reporting most of the pay-related data into the pay system, more emphasis should be placed on measuring and reporting pay-related administrative performance. And since the computer, not the DO, determines in most cases when and how much a Marine gets paid, the measurement system should provide more information relevant to the effectiveness of the automated portion of the system.

Most of the emphasis seems to be on measuring the performance of individual commands rather than the pay system as a whole. This is not detrimental, but the data gathered in the measurement process should also be used to provide information on the accuracy and timeliness of the pay system as a whole. It also appears that some of the information being reported to FD is not as useful in monitoring effectiveness as it could be. Some reports should therefore be modified or deleted entirely.

I. ORGANIZATION OF THE STUDY

The remaining chapters in this study will answer the subsidiary questions in paragraph 3 above. Chapter II is a review of literature on measurement systems and identifies criteria which were used to evaluate the pay system measurement techniques. Chapter III describes the system's major goals and the measurement procedures currently used to determine effectiveness. Chapter IV is an evaluation of these procedures in relation to the criteria shown in Chapter II. Conclusions of the research and recommendations for improving the effectiveness measurement system are provided in Chapter V.

II. CHARACTERISTICS OF MEASUREMENT SYSTEMS

Planning and control are two important activities carried out by all managers. Planning is deciding what to do and how to do it; control is ensuring that the desired results are achieved. Three types of planning and control activities take place in most organizations: strategic planning, task control, and management control. Strategic planning involves setting goals and deciding on the broad strategies to be used to attain these goals. This type of planning takes place at the highest levels of an organization. At the lowest levels are the rules, procedures, and specific tasks necessary to carry out the day-to-day operation of the organization. Task control is the process of ensuring that these specific tasks are performed efficiently and effectively. Management control lies between these two types of planning and control activities. It is the means by which management ensures that the strategies are carried out and the goals are being attained. [Ref. 3: pp. 4-5]

Part of the management control process consists of obtaining information on performance and using that information to determine the effectiveness of the organization, i.e., the extent to which it is meeting its goals. These two activities, measurement and evaluation, allow managers to determine what is working (i.e., performance contributing to

the attainment of goals) and what is not working (performance which needs to be changed in order to contribute to the attainment of goals). Knowing this, decision makers have the capacity to maintain and improve the organization's effectiveness by doing more of what is working and changing what is not [Ref. 8: pp. 10-11].

Information on effectiveness is obtained by measuring specific attributes of an organization. The measurement system used to obtain the information consists of the attributes to be measured, the process by which they are measured, the measurements themselves, and the method by which the measurements are transmitted to management. This chapter describes various characteristics of measurement systems that will be used to aid in evaluating the measurement of effectiveness in the Marine Corps military pay system.

A. WHAT IS MEASUREMENT?

Measurement in a simple form is an assignment process where numbers are assigned to represent some attribute of an object or event of interest [Ref. 9: pg. 20]. Objects or events are related in some way in the real world, and the measurement process attempts to reproduce that relationship numerically. For example, a person (an object of interest) cannot be measured directly; only attributes of that person such as height or weight can be measured. If one person is

heavier than another, a relationship between the two exists in the real world. This relationship can be reproduced numerically by assigning to each numbers which represent their weight.

To be useful, measurements must accurately reflect the real world relationship. In effect, measurement is a lens through which aspects of objects or events can be viewed. Evaluating a measurement system can be seen as determining the quality of the lens. [Ref. 10: pp. 1-2]

But measurement is not used solely to reflect aspects of real phenomena. Measurements are also made to provide information to decision makers. To be useful in this context, the measurements must support the decision-making process. The proper lens must be used if it is to be of value. For example, measurements can be taken which accurately represent the height and weight of two people. To decide which of the two is taller, only the measurements representing height are of value. The weight measurements, although accurate, are of no use to the decision maker.

Another level of measurement is evident when qualities or actions of people in organizations are measured. People can be motivated to alter their behavior and thereby influence the measurements. In other words, if people know they are being measured and will be affected by the results, they may be motivated to do a better job or perform some other

desirable action which they might not otherwise perform. To be useful in this context, measurement must motivate some desirable action.

Understanding these aspects of measurement will be helpful in determining the desirable characteristics of an effectiveness measurement system. Such a system should use measurement at all three levels. It should accurately describe attributes of effectiveness, support the decision making process, and motivate action to achieve goals.

B. CHARACTERISTICS OF MEASUREMENT QUALITY

To be of use to decision makers, measurements must accurately describe the attributes they are intended to represent. The quality of the measurement instrument, the measurement process, and the measurements themselves affect the accuracy of the description. For example, a man's height can be described by having him stand next to a wall, placing a mark on the wall next to the top of his head, and using a yardstick to determine the distance from the mark to the floor. If the yardstick (the measurement instrument) is too short, the description will not be an accurate representation of the man's height. If the man is wearing shoes or the mark is placed next to his ear instead of the top of his head (part of the measurement process), the description will not be accurate. And if the distance is stated in degrees Fahrenheit instead of inches (the measurement itself), the

description will not be accurate. This section discusses several characteristics which contribute to measurement quality.

1. Validity

Does the measurement really describe the attribute it is supposed to measure? Are the relationships between different measurements the same as the actual relationships between the objects being measured? These questions refer to the validity of the measurement process [Ref. 9: pg. 17; Ref. 10: pg. 4]. A process designed to measure accurately the height of a man is valid if the measurement actually describes his height and not some other aspect such as his height with shoes (or his weight or blood type). If two men are measured and the result states that the first is taller than the second, the measurement process is valid if the first really is taller. If a different yardstick is used to repeat the process under the same conditions, and the same result is obtained, the yardsticks are valid measurement instruments [Ref. 8: pg. 14].

2. Reliability

Reliability refers to the amount of inherent error in the measurement process [Ref. 9: pg. 41]. Normally, reliability implies the absence of errors, but if error does exist in the measurement system, the system can still be reliable if the error is properly accounted for and controlled [Ref. 9: pg. 16]. Otherwise, a measurement believed to describe

accurately an attribute may only reflect variances from the actual state of the attribute caused by error in the system itself [Ref. 8: pg. 323]. Two aspects of reliability which can readily be identified are consistency and bias.

Consistency refers to the degree of variation in results when the same object or event is repeatedly measured [Ref. 10: pp. 5-6]. If measurements of the same attribute are taken several times under the same conditions, the measurements are consistent if the same results are obtained each time [Ref. 8: pg. 14]. Measuring height is usually consistent; different yardsticks normally produce the same results when the same procedures are followed. On the other hand, measuring the quality of wine by tasting is not nearly so consistent. Different wine tasters produce more variation in their measurements of quality because their tastes are not the same, and one taster may not give the same quality rating to the same wine if tasted on different days because his ability to "taste" can differ under certain conditions (e.g., if he has a cold).

A measurement may be unreliable if it is biased, i.e., if it distorts the "true" state of the attribute being measured [Ref. 10: pg. 6]. A short yardstick provides a distorted measurement of height. Even though the measurements it produces are consistent, they are not reliable unless the exact amount of "shortness," or error, is known and is properly accounted for.

3. Meaningfulness

The concept of meaningfulness as a measurement characteristic is much more limited and technical than the normal idea of meaningfulness [Ref. 10: pg. 6]. Measurements are meaningful if the numerical statements made about them are meaningful and if logical inferences about the attributes being measured can be drawn without exceeding the limitations inherent in the measurements [Ref. 9: pg. 19; Ref. 10: pp. 6-8; Ref. 11: pg. 83]. Understanding measurement scaling will help explain this concept. There are four basic types of measurement scales: nominal, ordinal, interval, and ratio.

A nominal scale uses numbers or some other means to classify attributes. The number 1 can be used to represent men and the number 2 to represent women. There is no numerical significance to the numbers. They can be reversed or otherwise changed, since the only information they represent is that men are different from women. A statement like "Since women are 2 and men are 1, women are twice as good as men" does not make sense; it is not meaningful.

The ordinal scale adds the idea of order to the numbers. The top ten college football teams are ranked on an ordinal scale. Two teams can be represented by using the number 3 to represent the better team (team A) and the number 6 to represent the other (team B). How much "better" is not measured; team A is not twice as good as team B. Other numbers (such as 3 and 8) could be used, and as long as the

order is not changed, the information contained in the measurements is not changed: team A is better than team B.

The interval scale adds the concept of distance between numbers. The Celsius temperature scale assigns a specific unit of measure to represent a specific interval of temperature. Ratio scales contain the additional attribute of a unique origin or true zero point. The difference between interval and ratio scales can be better understood by looking at the difference between measurements of temperature and measurements of cash. Zero dollars means no cash; it is a true zero point. Zero degrees Celsius is an arbitrary zero point set at the temperature where water freezes; it does not mean no temperature. A cash amount of 20 dollars means twice as much cash as 10 dollars; the same ratio (2 to 1) is maintained no matter what scale is used to represent this amount of cash (e.g., 2000/1000 cents). On the other hand, it is not meaningful to say that 20 degrees Celsius is twice as hot as 10 degrees. Transforming the Celsius scale into degrees Fahrenheit does not maintain the same 2 to 1 ratio: the equivalent temperatures are 68 and 50 degrees Fahrenheit, respectively. The information conveyed by the measurements is that a specific interval exists between them: 10 degrees Celsius is midway between 0 and 20 degrees; 50 degrees Fahrenheit is midway between 32 and 68 degrees. [Ref. 11: pp. 78-84]

Measurement systems may use different scales for different types of measures. The important point is that in order to make meaningful statements about the data, the type of measurement scale and the inherent limitations of the numbers in that scale must be recognized.

C. CHARACTERISTICS OF MEASUREMENT USEFULNESS

Accurate measurements are of little value if they cannot be used to support the purpose for which they were made. Measuring effectiveness should provide information about the functioning of an organization which is useful to managers in determining how well the organization is doing in relation to its goals. The measurement system should also help determine what is causing the measured level of performance if the functioning of the organization is to be improved [Ref. 12: pg. 2]. If a problem is identified, managers should find out why so that they can correct not only the specific problem but also the cause of the problem so it won't recur. If things are working well in one part of the organization but poorly in another, managers should find out what is producing the good performance so it can be used throughout the organization.

The most appropriate measurement of an attribute may be too difficult and expensive to obtain. Other, less costly measures should be used in these cases. Even if the information is not "perfect," some measure of output is usually more

useful to management than no measure at all. The important thing is to recognize the imperfections when using the information to make decisions. [Ref. 3: pg. 478]

Many characteristics of measurements contribute to their usefulness. This section describes several important ones: relevance, understandability, comparability, standards, and the reporting process.

1. Relevance

Measurements are made for a purpose; they should contain information that is pertinent, or relevant, to that purpose [Ref. 10: pg. 9]. In an effectiveness measurement system the purpose is to determine the extent to which the organization is attaining its goals. The attributes being measured must be related to those goals; otherwise the information the measurements provide is not important for understanding effectiveness [Ref. 8: pg. 17].

The major goal of a baseball team is to win games. During a single game, the number of runs scored is relevant; that is the measurement which determines if that game is won. At the end of a season, the number of games won is the measurement that determines if the goal is met. But relevance is not limited to a single measurement that determines whether or not the goal was attained. Decisions need to be made on how to achieve the goal; if performance is unsatisfactory, changes should be made to improve that performance.

Measurements are relevant if the information they provide is significant in the decision-making process [Ref. 9: pg. 32].

During the course of the baseball season, the team's manager must decide which players to use to meet the goal of winning games. The team must have good hitters, good pitchers, and good fielders. If the team is not winning, the manager needs information to help decide if different players should be used. The ability of each player contributes to the goal, so measurements of the players' hitting, pitching, and fielding abilities are relevant.

Two elements of relevance are specification and timeliness [Ref. 10: pp. 9-10]. Specification involves deciding what attributes to measure and under what conditions to measure them [Ref. 11: pg. 84]. To determine whether or not a player is a good hitter, what measurements should the manager use? Some possibilities are the player's batting average, the number of runs he has batted in this season, and the number of hits he has had against left-handed pitchers. These are relevant measurements, since the manager can use them to make decisions about when to use this player to help the team win games. Other aspects of the player, such as his height and grade point average in high school, are not relevant -- they are of no help to the manager in attaining the goal.

Measurements must also be timely if they are to be helpful in decision making. Useful information which is not

available until after it is needed is not relevant for that decision [Ref. 3: pg. 479]. If a manager wants to win a baseball game, he can't wait until the end of the game to find out how many runs his team has scored. He needs to make decisions during the course of the game, and he needs to know the score during the game in order to make the right decisions. The final score is not timely or relevant in this case.

Measurements can also be untimely if they are not available until after the attribute they describe has changed [Ref. 10: pg. 10]. A player's batting average last season is not relevant to decisions made during this season. The manager needs to know how the player is performing now.

2. Understandability

The user of the measurement must be able to perceive its significance [Ref. 10: pp. 10-11]. There is no point in providing information to someone who doesn't understand it. Measurements stated in detailed, technical terms may be understandable to technicians who are familiar with that precise language; but, if the information is to be used by someone else, a more general though less precise description of the measurement is probably desirable [Ref. 8: pg. 322]. For example, describing a man's height as 1725.3 millimeters is not as understandable to an American as saying he is about 5 feet 8 inches tall.

A measurement term can also mean different things under different circumstances. An "error" in a pay record might mean that the person has received the wrong amount of pay. It might also mean that a mistake exists which has not yet caused an erroneous payment but will if the mistake is not corrected. Another possibility is that a mistake exists, such as the wrong copy of a document is filed in the record, but it does not affect the amount of pay the person is entitled to receive. When the number of "errors" is reported to managers, it is important that they understand which type of error the measurement describes.

3. Comparability

If information about similar attributes, or about the same attribute at different points in time, will be compared in the decision-making process, the measurements of those attributes should be comparable [Ref. 3: pg. 480; Ref. 8: pg. 11]. The decision maker may not make appropriate comparisons if the measurements were made using different processes or under different circumstances. To determine which of two men is taller, their height should be measured the same way: with or without shoes, in centimeters or in inches. To determine if there are more errors in pay accounts this month than there were last month, the same definition of "error" must be used.

4. Standards

In order to know if an organization has attained its goals or is performing in a manner which will enable it to attain its goals, measurements must be taken of relevant attributes at various times. Depending upon the specific wording of the goals, these measurements may or may not be enough to indicate effective performance. When goals are stated in broad terms such as "to win baseball games" instead of "to win 90 games this season," the decision maker must compare the measurements made of current performance against some standard or desired level of achievement for the attribute being measured.

Since a manager wants the team to win all its games, it may be appropriate to state the team's goal that way: to win games. But it would be unrealistic to say that the team is ineffective if it loses only one game during a 162-game season. A standard should be set; i.e., effectiveness should be defined in specific terms such as "the team is considered effective if it wins at least 90 games this season." When the season is half over, the manager can compare the number of games already won with the standard: the team is being effective if it has won at least 45 games. If only 40 games have been won, the manager should make changes to improve performance. The standard allows the manager to monitor the

team's progress throughout the season so he knows either that the team is performing effectively or that something needs to be done to improve effectiveness.

5. Reports

The information provided by measurements must be transmitted to the decision makers who will use it. The adequacy of reporting that information is a major factor which influences measurement usefulness [Ref. 8: pg.17]. The method, completeness, and timeliness of reporting contribute to its adequacy.

The method of reporting is related to understandability. Management must understand not only the measurements themselves but also the way they are presented in the reports. The medium used should be one the user can relate to [Ref. 8: pg. 18]. The significance of several pages of data should be summarized in a few paragraphs. A full page of written information can sometimes be reduced to a simple graph. Only the information that is actually needed by management should be reported; if too much data is shown, there is a tendency to ignore the whole report [Ref. 3: pg. 513]. Attention may be focused on trivial data instead of the important information helpful to management.

Sometimes not enough information is reported. In many large organizations relevant information exists but is not provided to the managers who could use it [Ref. 3:

pg. 514]. If relevant measurements are made and would be helpful to management, they should be included in the reporting process.

Measurements are made to aid in decision making. Not only must the measurement be timely, but also the reports must be made available in time to assist in any decisions that might be required, even if accuracy suffers. A measurement which reveals a problem is of no use if it is not reported soon enough to correct the problem. Approximately accurate measurements which are reported in time for management to take action are much more preferable than precisely accurate ones which are not reported until long after anything can be done about the problems they uncover [Ref. 3: pg. 515].

D. MOTIVATIONAL CHARACTERISTICS OF MEASUREMENT

An organization's effectiveness is affected by the attitudes and behavior of the people in the organization and by the quality of the work they perform. People perform at a certain level because they want a particular outcome to take place (their preferences) and because they believe their performance will achieve that outcome (their expectations). No matter how much they would like the outcome to occur, it is not likely that they will work hard if they do not expect it to happen. [Ref. 13]

The measurement of effectiveness is also affected by these behavioral aspects of the organization. People can be motivated to perform desirable actions if they know they will be affected by the results of the measurements [Ref. 10: pg. 15]. Recognizing the motivational characteristics of measurements allows managers to determine if the measurement system itself is contributing to or detracting from the organization's effectiveness. Two important characteristics are controllability and distortability.

1. Controllability

A measurement is controllable if the person whose performance is being measured can influence the object or event that is reflected by the measurement [Ref. 10: pp. 16-17]. If an individual feels responsible for the result of the measurement, he is more likely to be motivated to influence that result than if he doesn't believe his behavior determines the outcome.

Objectivity plays a part in how much control an individual has in the measurement process [Ref. 10: pg. 17]. If the measure is objective and the individual understands how the measurement is calculated it is easier to relate his performance to the result of the measurement. If the measure is subjective, the connection between performance and result is not so easy to see; the measurement is not nearly as controllable.

Subjective measures, however, should not be overlooked. Judgments made by capable people are usually better measures of quality than numerical, objective measures. For example, a subjective judgment of beauty is probably far superior than a numerical representation. Quality of performance is extremely difficult to measure objectively. A qualified person can take into account the circumstances causing a certain level of performance when making judgments about quality. Even though these subjective measures are not "perfect," some acceptable measures of quality should be used. [Ref. 3: pp. 472-477]

2. Distortability

Measurements which can be influenced directly by the person being measured may be changed before being reported. In these cases, the information reported is not representative of the actual attribute being measured but is a distorted view of reality which the individual has chosen to report. Measurements made using questionnaires or interviews are susceptible to distortion. Erroneous information can be entered into the measurement system if proper controls are not in place. Managers must be aware of the possibility of distortion when using information provided by these types of measurements. [Ref. 10: pp. 17-19]

III. CURRENT METHODS OF MEASURING EFFECTIVENESS

There is no single report used by top-level Marine Corps financial management to determine the effectiveness of the pay system. The FDMC and his staff in FD use several methods to gauge effectiveness, ranging from official reports to informal telephone calls. This chapter describes the methods currently used by FD to monitor effectiveness. These methods will be evaluated in chapter IV by reference to the measurement system characteristics discussed in the last chapter.

The FDMC's main concerns regarding the pay system are accuracy and timeliness, so pay system effectiveness as used in this thesis means accurate and timely pay. Exactly what is meant by accurate and timely pay is not specifically defined for the pay system as a whole. Standards have been set, however, for some measurements which will be described later in this chapter.

A broad meaning of accuracy would be that Marines should be paid no more and no less than that to which they are entitled. Timely pay means not only that Marines should be paid on payday, but also that changes in entitlements should be reflected in paychecks within a reasonable period of time after the change is effective. The definition of "reasonable" depends on the circumstances of the payment. Marine

Corps policy generally provides that Marines will be paid what has been reported into the pay system; DOs may adjust system-generated payrolls if a change hasn't been reported or processed within 60 days after it became effective [Ref. 7]. A reasonable period of time in the normal sense would probably mean as soon as possible but not more than 60 days. But if a Marine is being discharged, all changes should be reflected in the final payment to prevent overpayments that can't be recovered. A reasonable period of time in this case means immediately.

Accuracy is measured in several ways and reported to FD in a number of reports. Timeliness of pay is not specifically measured but is indirectly considered as part of some measurement methods. The methods used fall into three categories: (1) the MCDOSET Program, (2) the Disbursing Performance Standards Program, (3) other reports and miscellaneous methods.

A. THE MCDOSET PROGRAM

The MCDOSET Program is administered by FD and consists of two teams (East Coast and West Coast) which perform examinations of Marine Corps commands to evaluate their disbursing function and that part of their administrative function associated with military pay. Each team is composed of disbursing and administrative experts headed by a lieutenant colonel who reports directly to the Head of the Accounting

and Finance Branch at FD. Each major command (generally those with 500 or more Marines) is examined annually; other Marine Corps units are examined biennially.

Examinations are conducted using an extensive set of standard procedures to provide uniformity between the two teams and among the members of each team. Examinations of commands without DOs have two phases, an administrative service record phase and an administrative internal control phase; commands with DOs are also examined in a disbursing PFR phase and a disbursing internal control phase. The results of the examinations are reviewed with the commander of the unit being examined and then reported to FD.

1. Administrative Service Record/Disbursing PFR Phases

Personnel records are audited in these phases to determine pay-related errors for which either the administrative office or the DO is responsible. The audit is conducted primarily in the administrative office by reviewing service record books containing leave and earnings statements (LESS) and other pay-related documents. A random sample of records is chosen using statistical procedures developed at the MCFC; these records are then audited to detect errors. An error would be charged if the administrative office or the DO made a mistake in reporting a pay-related event, failed to report something they should have reported, or failed to correct an error for which they must initiate corrective action.

Two types of errors are defined. Monetary errors have actually resulted in a mispayment; advisory errors may result in mispayments if they are not corrected. Dollar values of actual and potential over- and underpayments are also calculated. Separate statistics are kept for administrative errors and disbursing errors. The percentage of monetary errors caused by each office is determined and reported separately as the command's administrative and disbursing error rates.

2. Administrative/Disbursing Internal Control Phases

The administrative or disbursing office's internal controls, policies, and procedures are reviewed in these phases to determine if they comply with applicable Marine Corps directives. MCDOSSET interviews administrative and disbursing personnel, reviews written operating procedures and other documents, and observes the functioning of each office, using standard checklists and subjective judgments to determine the extent to which internal controls are effective and efficient. There is no objective "error rate" associated with these phases; however, any deficiencies in specific areas of the internal control procedures are noted.

3. Reports

The results of each examination are discussed with the commander of the unit being examined and then reported to FD. (See Appendix A for a sample report.) The report is divided into several parts. The cover letter contains a

summary of the results, showing the administrative and disbursing office's percentage of monetary errors (the "official" error rate), percentage of advisory errors, and a statement of the extent to which each office's internal controls complied with the requirements of applicable regulations ("substantially," "for the most part," etc.). Separate enclosures detail the results of each phase of the examination.

The number of errors and actual or potential dollar values of mispayments are shown in the enclosures, broken down into specific areas of pay (e.g., basic allowance for quarters). Areas of internal controls which are deficient are also noted (e.g., promotion procedures or timeliness of reporting). Significant findings which identify problem areas and their causes, as determined by the examination team, are reported separately; recommendations are also made on how to correct the problems. The report is forwarded to FD via the examined command, which must endorse the report and state specific corrective action taken on each of the significant findings. FD reviews each report, ensuring action has been taken on the findings and looking for trends which might indicate a Marine Corps-wide problem.

Annual summaries of all the examinations are reported to FD by each MCDOSSET (see Appendix B). These summaries contain the overall administrative and disbursing error rates and internal control findings identified by each team, as

well as enclosures showing the most common errors and problem areas identified during the year. The MCFC issues an annual comparative analysis of the MCDOSET results, with summaries of the combined statistics, comparisons with previous years' results, and certain statistical analyses (see Appendix C).

B. DISBURSING PERFORMANCE STANDARDS PROGRAM

Five areas which represent measurable functions performed by DOs are monitored under this program: (1) separated Marines' PFRs, (2) master military pay accounts (MMPAs), which are the official JUMPS/MMS pay accounts, (3) the disbursing PFR phase of MCDOSET, (4) reenlistment vouchers, and (5) travel vouchers. Since travel payments are not part of the military pay system being reviewed in this thesis, travel vouchers will not be included here.

An accuracy rate goal, or performance standard, for each area has been established by the FDMC as a standard indicating acceptable performance. Accuracy rates are determined for each DO and for the Marine Corps as a whole during audits performed by MCFC or MCDOSET at various times. The results of the audits are reported to the DOs and to FD. Semianually, MCFC sends a summary report of the previous six months' audits to FD (see Appendix D). The FDMC then sends reports to the commanding generals of the audited Marine Corps commands, with details of their DOs' performance measurements.

Periodically, the Disbursing Performance Standards Program is reevaluated to determine if the accuracy goals should be adjusted, if a measured area should be deleted or a new one added, or if other changes should be made to improve the program. The reenlistment voucher area was recently added to the program as a result of one such evaluation. (Appendix D does not contain a section on this area because it had not yet been included in the program.) Although this program does not attempt to measure all pay-related areas (such as administrative office performance as part of the pay system), the FDMC uses it as a major indicator of the effectiveness of the pay system [Ref. 5].

1. Analysis of Separated Marines' PFRs

When a Marine is discharged or otherwise separated from active duty, the DO maintaining that Marine's PFR computes the amount due at separation and makes the final payment. The PFR is then forwarded to MCFC, where it is audited along with other pertinent data to determine if the final payment was accurate. Errors in the final payment computation are identified and analyzed to determine the reason for the error. Monthly reports are issued to each DO, with a detailed summary reported to FD (see Appendix E).

The report to FD contains the accuracy rate for final payment computation for the Marine Corps as a whole and for each DO (identified by disbursing station symbol number, or DSSN). It also shows the number of errors in computation and

dollar value of under- and overpayments broken down by DSSN and reason. Graphs are included showing the accuracy rates for each DSSN for that month and the monthly Marine Corps accuracy rates for the previous year. The semiannual report to FD shows the average accuracy rates for the previous six months for each DO and the Marine Corps as a whole, along with a graph comparing the rate of each DO with the performance standard.

2. MMPA Audit Analysis

The MCFC audits printouts of a random sample of 75 pay accounts from each DO during one month each quarter to determine if the accounts contain proper and accurate data. Errors are identified and reported to the DO, with a semiannual summary report to FD (see Appendix F).

The summary report contains accuracy rates and the number, dollar value, and types of errors resulting in over- and underpayments for each DO and the Marine Corps as a whole. Also included are totals for advisory errors (those not resulting in mispayments) by type and totals for errors attributable to administrative offices. The semiannual performance standards report to FD shows the average accuracy rates for the previous two quarters for each DO and the Marine Corps as a whole, along with a graph comparing the rate of each DO with the performance standard.

3. MCDOSET Disbursing PFR Phase

The monetary error rate determined during the disbursing PFR phase of the annual MCDOSET examination is converted into an accuracy rate (100% minus the error rate) and included in the report of the Disbursing Performance Standards Program for the second semiannual period of each fiscal year. Only the accuracy rate attributable to DO performance is included; administrative performance is not part of this program.

4. Analysis of Reenlistment Vouchers

When Marines reenlist, they may be entitled to payments for reenlistment bonuses or for unused leave; if they have used too much leave, it becomes "excess" and monies must be deducted from their pay. Reenlistment vouchers are completed by the administrative office and forwarded to the DO, where any payments due are computed and paid. The vouchers are then forwarded to the MCFC, where they are audited to ensure that applicable regulations were followed when completing them and that payments were computed accurately.

The results of the audits are reported monthly to the DOs, with a summary report to FD (see Appendix G). Disbursing and administrative monetary and advisory errors are reported. The FD report contains data on the number, percentage, causes, and dollar values of errors for each DO

and the Marine Corps as a whole as well as graphs depicting certain statistical comparisons, such as the total error rate and the DO monetary accuracy rate.

This area was recently added to the Disbursing Performance Standards Program. The semiannual performance standards report to FD will show the average DO monetary accuracy rate for the previous six months for each DO and the Marine Corps as a whole, along with a graph comparing the rate of each DO with the performance standard.

C. OTHER REPORTS AND MISCELLANEOUS METHODS

FD uses several other reports and methods to help gauge pay system effectiveness. Although these are not part of a specific program of evaluation, they provide information on aspects of the system not included in the MCDOSSET or Disbursing Performance Standards Programs.

1. Overpayments Processed by Separations Branch

A monthly report results from the MCFC audit of PFRs for separated Marines (see Appendix H). It is different from the report under the Disbursing Performance Standards Program in that it includes only overpayments and it includes all overpayments, not just those attributable to a DO miscalculation of a final payment. Other reasons include Marines already in an overpaid status when they are discharged because of a prior overpayment and Marines who are separated before the end of their normal enlistment and must have

certain monies recouped (such as unearned reenlistment bonuses or excess leave). The report identifies the total number and dollar value of overpayments, broken down by category and cause.

2. Analysis of Out-of-Balance MMPAs

This monthly report identifies pay accounts which have been "out of balance" (underpaid or overpaid by \$50 or more, as reflected in the computer MMPA record) for nine months or longer. Since the report is the product of a computer data base inquiry and not a detailed audit, the Marines may or may not be actually over- or underpaid (in other words, there could be a valid reason the computerized record is out-of-balance). Information on specific accounts is sent to the DO maintaining the account, where it is reviewed to determine what, if any, corrective action is needed.

The summary report to FD (see Appendix I) contains statistical information for each DO and the Marine Corps as a whole on the number and dollar value of the "overpaid" and "underpaid" accounts. An "accuracy rate," which indicates the percentage of accounts which are not "out-of-balance," is included.

3. LES Sample Audits

Every month DO personnel audit a 5% random sample of their PFRs to determine if system deficiencies (mistakes in computer system design or programming) are causing errors in

the pay accounts. LESSs are maintained in the PFRs and display data in the pay accounts; errors on the LESSs, therefore, reflect errors in the accounts. DOs report to MCFC the number and types of errors detected and whether the errors can be attributed to the DO, the administrative office, or the "system." The MCFC analyzes this information, determines if computer deficiencies do in fact exist, and makes plans to correct the deficiencies.

The purpose of this audit is to determine if previously unknown system deficiencies exist without requiring an audit of all LESSs each month, as was done before 1986. When a deficiency is discovered, the MCFC determines its cause and then identifies all pay accounts affected by that deficiency. Any errors in accounts not in the 5% sample can then be corrected.

The MCFC also reports the results of the monthly audits to FD (see Appendix J). The report contains summarized data on the number and percentage of errors found by each DO in the sampled LESSs, the results of a statistical analysis of the data, and the results of the MCFC's analysis of the errors attributable to the "system."

4. System Assurance Officer (SAO) Quarterly Status Report of JUMPS/MMS Deficiencies

When computer system deficiencies are discovered, the MCFC must analyze them to determine their cause and then schedule them for correction. The analysis and corrective

action may take a few days or many months. The commanding officer of the MCFC has been designated the SAO and must notify all DOs of the deficiencies and provide instructions for overcoming them until they can be corrected [Ref. 7]. When a significant deficiency is discovered, DOs and administrative offices are notified immediately in an "SAO message" issued by MCFC. MCFC also provides a quarterly report to DOs and FD which lists the status of all deficiencies discovered since the last report and of the deficiencies which had been previously listed as unresolved [see Appendix K].

5. Other Reports

Agencies outside the Marine Corps, such as GAO and the Naval Audit Service, periodically examine various aspects of the pay system. These examinations can range in scope from a general review of the entire system to a detailed audit of a specific item such as accounting for leave. The reports of these audits provide FD with information on the effectiveness of the system.

The Marine Corps must conduct an annual system manager/user review of the pay system and report the results to the Department of the Navy. The MCFC reviews the operation and performance of the system against specific accounting requirements provided by the Comptroller of the Navy to determine if the pay system complies with established

accounting principles, standards, and related requirements. This review is used by FD as one indication of the effectiveness of the pay system. [Ref. 2]

FD also receives ad hoc reports as needed from the MCFC, from staff agencies at HQMC, and from field commands. These special-purpose reports can provide information on specific issues relating to pay system effectiveness which is not contained in the normal recurring reports described above.

6. Miscellaneous Methods

Various other methods are used by FD to monitor the effectiveness of the system. DOs, MCDOSSET, and MCFC provide verbal and written feedback regarding policy and procedural changes, quality of education and training in pay-related occupations, and other issues of concern. Complaints about certain aspects of the system are received during field visits by FD personnel, at various conferences, from Inspector General inspections, and from phone calls and written correspondence received at HQMC.

These informal methods do not provide quantitative measures of effectiveness, but they are, nevertheless, considered important indicators of problems. As expressed during interviews with FD personnel, "if there are lots of complaints, something must be wrong."

IV. ANALYSIS OF CURRENT METHODS

In this chapter the measurement system characteristics described in Chapter II will be used to evaluate the methods the Marine Corps uses to measure pay system effectiveness. Each method presented in Chapter III will be examined to determine the extent to which measurement quality, usefulness, and motivational capability exist. Each method may have more than one purpose (e. g., the MCDOSSET examinations provide information to the command being examined as well as to FD; other reports are used as management tools for individual DOs). Only the aspects related to the overall pay system goals of accuracy and timeliness will be analyzed here.

The quality characteristics of the methods will be examined first to see if the measurements accurately describe the attributes they are intended to represent. The usefulness of the measurements will then be analyzed to see if they support the purpose for which they are made. The purpose of the measurements, from FD's viewpoint, is to determine and monitor pay system effectiveness and to discover the reasons for the measured level of effectiveness so improvements can be made where needed. Motivational characteristics will also be examined to see if the measurements can be affected, either positively or negatively, by the behavior of people.

This analysis will provide the basis for determining if the current methods, either in whole or in part, adequately measure the accuracy and timeliness of the pay system. Conclusions of the analysis and recommendations for improving the measurement of effectiveness will be presented in Chapter V.

A. THE MCDOSET PROGRAM

1. Administrative Service Record/Disbursing PFR Phases

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? The audit of a sample of service records in these phases is intended to measure the rate at which the administrative and disbursing offices commit pay-related errors. The sample is chosen by using a statistical sampling design; the percentage of errors found in the sample is a statistically valid measurement of the percentage of errors actually contained in the service records.

(2) Reliability. Is there inherent error in the measurement process? The audits are conducted by highly qualified disbursing and administrative personnel using standard procedures to provide consistent, unbiased results. Although the MCDOSET examiners undoubtedly make some mistakes, they are selected for the job because of their expertise and experience. Because they are highly qualified,

the extent of inherent error in their examinations is minimized to an insignificant level. The inherent error resulting from auditing a sample rather than all records is known, since the sampling design is chosen to obtain a given precision level. The process provides a reliable measurement of the rate of pay-related errors in the service records.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? Errors are counted on a ratio scale and presented as a percentage of records with errors, also a ratio scale. If there are 10 records with errors in office A and 5 in office B, office A has twice as many records with errors as office B. An office with a 10% error rate did not necessarily make twice as many errors as one with a 5% error rate; however, it did make errors twice as often.

b. Measurement Usefulness

(1) Relevance. Is the information provided by these phases relevant to overall pay system accuracy or timeliness? The audits measure the rate at which administrative and disbursing offices have committed errors which either have resulted in a mispayment (monetary error) or may result in a mispayment (advisory error). The existence of a monetary error means there has been a loss of accuracy in the pay system; the existence of an advisory error means there is the potential for a loss of accuracy. This information is

therefore relevant to the measurement of pay system accuracy. The results of each audit are also timely; they are available immediately after the examination.

(2) Understandability. Is the significance of the measurements easily understood? The results of the audit of each office are stated as a percentage of personnel records containing each type of error. The definitions of each type of "error" are specifically stated and should be easily understood. The significance of a 10% monetary error rate in an administrative office should easily be understood: 10% of that office's records contain one or more errors which have resulted in a mispayment. Although not a part of the "official" error rate, advisory errors can be significant because they reflect mistakes in such categories as leave accounting which, if not corrected, can result in high dollar-value mispayments.

The contribution of an individual office's error rate to the accuracy of the overall pay system is not so easy to understand. The extent to which a specific office contributes to errors in the overall system depends on the number of records that office maintains. If an office has 10,000 records and a 5% error rate (500 records with errors), it contributes more to inaccuracies in the pay system than an office with 1000 records and a 10% error rate (100 records with errors). The results of all the audits must be

aggregated to use the measurements as an indication of the accuracy of the overall pay system; the significance of the error rate should then be easily understood.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? Audit procedures are standardized to the maximum extent possible between the East and West Coast MCDOSSETs and among the members of each team. The results of one examination can therefore be appropriately compared with the results of another, even if it was not performed by the same team or team member. The definition of "error" and the examination process has been changed in recent years, however. Before fiscal year 1984 the error rate included all errors, even if it did not affect the amount of pay a Marine did or would receive. In 1984 and 1985 the reported error rate included both monetary and advisory errors; the two types were not differentiated. In 1986 the current definitions of errors were used during the examinations. Before fiscal year 1986, the disbursing portion of the audit was conducted by examining documents in PFRs, not personnel records, and the PFRs contained far fewer documents in 1985 than before. Audit results beginning in 1986 are, therefore, not comparable with prior years.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? The pay system goal of

accuracy implies 100% accurate payments: no monetary errors. Although this level of performance may be desired, it is unrealistic to achieve; so, the FDMC has established a standard (currently 96% accuracy, or a 4% error rate) for the MCDOSSET disbursing PFR phase as part of the Disbursing Performance Standards Program. This standard indicates an acceptable level of accuracy. A standard of 94% accuracy had been established for the MCDOSSET service record phase, but this standard has not actually been used to describe acceptable administrative performance in this area, probably because even 94% accuracy has been extremely difficult to achieve (the overall pay system administrative accuracy rate for FY86 was 87%). The results of the two phases are not combined into a single error rate for each command, and there has been no standard established for the accuracy of the overall pay system.

(5) Reports. Are the measurements adequately reported to FD? The results of these phases of the MCDOSSET examinations are submitted to FD in four types of reports. The first is the report of each individual examination, which is written by MCDOSSET and sent to FD via the examined command (see Appendix A). This report consists of a cover letter with summarized information of the results, the monetary and advisory error rates of the administrative and disbursing phases. Causes of significant error trends in each phase are stated in enclosures to the report, along with

recommendations for corrective action. Specific details (e.g., total number of errors discovered, the dollar value of actual mispayments, and the number of errors caused by computer deficiencies) are also included in enclosures to the report. This method of presenting the results of each examination is understandable because the important information is readily identifiable. The main points (the error rates) are shown at the beginning of the report, significant findings are singled out with causes and recommendations also shown, and the details are included separately. The report is available to FD within three months of the examination.

The information provided by this report is of most use to the examined command. Individually, the reports do not show FD the effectiveness of the overall pay system; they can be used, however, to determine the contribution of specific commands to the overall accuracy of the system. Aggregation of the data in all the reports would provide information on the accuracy of the overall system.

A second type of report showing the results of the service record/PFR phases is the annual summary prepared by each MCDOSSET (see Appendix B). These two reports cover the examinations conducted by each team throughout the previous fiscal year. Each report consists of a cover letter stating the overall disbursing and administrative monetary ("chargeable") error rates determined by the team, with separate enclosures showing the most common errors and totals

of the statistics contained in the individual reports. Unlike the individual reports, the percentage of advisory errors is not shown in the cover letter but must be picked out in the detailed enclosures. The error rates of individual commands are not shown. The reports are usually available within a month after the end of the fiscal year and provide FD with separate data from each team; they must be combined to provide information on the overall pay system.

The third report is the annual comparative analysis of the MCDOSET results prepared by the MCFC (Appendix C). This is the only report which shows some combined data from the two MCDOSETs and is usually available within three months after the end of the fiscal year. The report is not meant to be an overall summary of the data from both MCDOSETs, so it does not show the overall error rates in the cover letter (the overall monetary error rate is shown as part of an enclosure). Instead, it provides an analysis and statistical comparison of the various categories of errors from the two annual MCDOSET summaries. Enclosures provide other information, such as the number and dollar value of overpayments and underpayments from monetary errors broken down by administrative/disbursing phases and category of error. Graphs are used to depict visually the significance of various reasons for underpayments and overpayments. No information is included on advisory errors. An enclosure

attempts to compare the results of examinations in previous years even though these data are not truly comparable (see section (3) above).

The fourth report shows only the annual results of the disbursing PFR phases and is submitted as part of the Disbursing Performance Standards Program (Appendix D). It shows a summary and graph of the monetary accuracy rates.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? The audits in these phases are performed to find errors made by administrative and disbursing personnel. Even an error caused by a computer deficiency will be "charged" to disbursing if it has not been corrected, because the DO is responsible for finding these types of errors. The audit is objective; when an error is found, MCDOSSET can easily show what it is and how it was determined. Errors are well-defined, and the error rates are easily calculated. The measurements are controllable because the errors are directly attributable to the people of the command being examined. Even if an error was actually made by a previous command, the current administrative or disbursing office should have discovered the mistake during its review of the records when the Marine joined the command. The annual MCDOSSET examination provides an incentive for proper behavior.

(2) Distortability. Can the measurements be purposely reported improperly? The results of the audits are not easily distorted. Either an error exists or it doesn't. MCDOSSET finds the errors and, since they are independent of the command being examined (they work directly for FD), they are not likely to be influenced to overlook errors purposely or change the results of the audit.

2. Administrative/Disbursing Internal Control Phases

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? The review of an office's internal controls, policies, and procedures in these phases is intended to measure the extent to which they comply with applicable regulations. Although the measurement is subjective, with no numerical value assigned, the on-site nature of the review and the reliance on a variety of measurement methods (direct observation, review of written policies, interviews) allows MCDOSSET to make a fairly valid determination of the office's compliance.

(2) Reliability. Is there inherent error in the measurement process? The reviews are conducted by highly qualified disbursing and administrative personnel using standard procedures and checklists to minimize inconsistencies. The measurements themselves are subjective and are based on the experience and expertise of the MCDOSSET personnel, not on an objective "error rate" based on number of

errors or discrepancies found. The measurement is not as reliable as the error rates determined in the service record/PFR phases. It does provide, however, a formal and systematic measurement of the quality of the procedures used by administrative and disbursing personnel in the operation of the pay system.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? None; there is no number assigned to the measurements. Statements such as "fully", "substantially", and "for the most part" compliant are used instead. This results in a verbal form of ordinal scale, where fully compliant is "better" than substantially compliant, etc. How much better can not be determined.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? The pay-related policies and procedures prescribed by Marine Corps directives are intended, among other things, to help ensure that Marines are paid accurately and timely. The extent of compliance with these directives is, therefore, one indication of the ability of an administrative or disbursing office to contribute to overall pay system accuracy and timeliness. The internal control phases of the MCDOSSET examinations provide information that is relevant to pay system effectiveness. One specific measurement in this

phase (the percentage of unit diary entries reported in excess of ten days after the action occurred) is directly related to pay system timeliness.

(2) Understandability. Is the significance of the measurements easily understood? Deficiencies in specific areas of internal control procedures are not merely discovered during the examinations; MCDOSSET also explains the causes and effects of the deficiencies. For an individual office, the significance of this measurement is fairly easy to understand. The adequacy of an office's internal controls contributes to adequacy of the overall pay system's internal controls, but the extent of that contribution is not easily understood from the results of the examinations. Since there is no numerical measurement, aggregation of the data is not possible. If two-thirds of the commands examined are substantially compliant with regulations and one-third is not, does this mean that the internal controls of the overall pay system are substantially compliant? It depends on the size of the commands. What significance does the weakness of a specific area of internal control have on the effectiveness of the overall pay system? It depends on the extent of the effect of that weakness on accuracy and timeliness. These things are not easily understood from the measurements.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? Examination procedures are standardized as much as possible;

the review of a specific area of internal control is performed in much the same way by each team. The final determination of the extent of compliance is largely subjective and is not as readily comparable as the error rate determined in the service record/PFR phases. A determination of weakness is not based solely on statistics, and the causes of weakness may be different for each command examined.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? The implied goal here is full compliance with regulations. There is no standard or specifically stated level of acceptable performance. If a command is compliant for the most part, is this acceptable? At what point is performance unsatisfactory or unacceptable?

(5) Reports. Are the measurements adequately reported to FD? The individual report of examination (Appendix A) consist of a cover letter containing the extent of compliance and the areas of weakness. Enclosures contain significant findings with causes and effects of specific weaknesses and a table showing the areas of internal control which were reviewed and which ones were considered deficient, including the percentage of untimely unit diary entries for individual administrative offices in the command. The method of presentation is easy to understand; the main points are identified first, with details readily available. This

report is of most use to the individual command, however, since by itself it does not contain sufficient information on overall pay system effectiveness.

The annual summary prepared by each MCDOSSET (Appendix B) contains enclosures explaining the most common types of deficiencies determined by each team during the fiscal year and a table showing areas of administrative internal control considered deficient throughout the year. There is no determination of the extent of compliance which combines the results of all examinations, nor is a combined percentage of untimely unit diary entries computed and shown. These two reports provide much useful information on deficient areas of internal control, but they do not indicate if overall pay system internal controls are adequate. The annual comparative analysis of the MCDOSSET results (Appendix C) does not cover the internal control phases. FD does not really have a concise report of the overall results of these phases of the MCDOSSET examinations.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? The review of internal controls determines the adequacy of the behavior of people in complying with regulations. The measurement of the extent of compliance, although subjective, provides an incentive for proper behavior. When problem areas are identified, corrective action must be taken. Since FD

monitors the individual reports to ensure that weaknesses are strengthened, the command has an incentive not only to follow proper procedures but also to correct deficiencies when they are identified.

(2) Distortability. Can the measurements be purposely reported improperly? A lot of the measurement process consists of observing and interviewing personnel during a very short period of time (a few hours to a few days, depending on the size of the command). Weaknesses can possibly be "hidden" from MCDOSET during this time by giving misleading information to the team members. The expertise and experience of MCDOSET personnel minimizes the extent of distortability, but it still exists because of the nature of the examination process.

B. THE DISBURSING PERFORMANCE STANDARDS PROGRAM

1. Analysis of Separated Marines' PFRs

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? The monthly audit of all PFRs of Marines separated from active duty is intended to determine the percentage of PFRs containing errors made by DOs in computing the final settlement payment. It does not measure the total percentage of Marines who are overpaid at separation, since a Marine can already be in an overpaid status at the time of discharge for a number of

reasons not related to a DO's mistake in computing the amount due at separation. The audit is a valid measurement of mistakes made by DOs only and of the mistakes made at the time of separation only.

(2) Reliability. Is there inherent error in the measurement process? The audit is conducted by MCFC personnel using standard procedures to provide consistent, unbiased results. There is no sampling error, since all PFRs are audited. Mistakes in auditing are minimized because the same qualified personnel perform the audits each month.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? Errors are counted on a ratio scale and presented as a percentage of PFRs with errors, also a ratio scale. A DO with 4 errors made twice as many mistakes as a DO with 2 errors; a DO with an error rate of 4% made errors twice as often as a DO with a 2% error rate.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? The existence of an error in a separated PFR means the final payment was inaccurate; the Marine was either underpaid or overpaid. The measurement is therefore relevant to overall pay system accuracy.

(2) Understandability. Is the significance of the measurements easily understood? As part of the Disbursing Performance Standards Program, this measurement deals with the performance of DOs only. Marines can be overpaid or underpaid at separation because of mistakes made by administrative offices also, as well as for reasons not caused by either office. Also, a mispayment made the month before discharge which causes the Marine to be overpaid and not be entitled to a final payment is not considered an error in this audit. The audit is strictly a measurement of the ability of the DO to compute final settlement payments accurately. However, from the presentation of the data in the report, it is not readily apparent that this audit determines mispayments made only by DOs and only at the time of separation.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? The audits are performed by the same office using the same procedures each month. The measurements are comparable.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? A standard has been set (currently 98% accuracy) for this part of the Disbursing Performance Standards Program to indicate acceptable performance.

(5) Reports. Are the measurements adequately reported to FD? The monthly report to FD (Appendix E) contains a table summarizing the error and accuracy rates of each DO and the Marine Corps as a whole. Amounts of mispayments are not summarized in this table; they are shown in separate enclosures which provide detailed statistics on the number, types, and dollar value of errors causing under- and overpayments for each DO and the overall Marine Corps. There is a lot of detailed data (there are 43 different types of errors) but no analysis of the information. A graph compares the accuracy rates of DOs against each other and the Marine Corps average (not the 98% standard). Another graph shows the average Marine Corps accuracy rate for each month of the current fiscal year.

The specific information portrayed by the data is difficult to understand just by looking at the report. For example, enclosure (1) contains columns on the total number of PFRs processed; the number and percentage of final settlements required, frauds, and PFRs reviewed; the number of PFRs rejected for monetary and advisory errors; the error and accuracy rates; and the number of PFRs received by the MCFC in an overpaid status. There is no indication that the error and accuracy rates are computed by using the number of PFRs reviewed column and the total of the two columns under number of PFRs rejected. There is no definition of advisory errors elsewhere in the report, but PFRs with these errors

are included when computing the error and accuracy rates shown. The total number of errors shown in the other enclosures is not necessarily the same as the total number of PFRs rejected, because a PFR may contain more than one error. The significance (or insignificance) of the number of PFRs in an overpaid status is not explained. In enclosure (1) to the sample report in Appendix E, the first row of data shows that this DSSN had an accuracy rate of 100%, yet 10% of the PFRs (16 of 158) were in an overpaid status. Is this information significant? Most of the information in this report appears to be of more use to analysts at the MCFC than to managers at FD.

The semiannual report of the Disbursing Performance Standards Program (Appendix D) contains summarized information of the monthly audits, including a graph comparing DOs against each other and the 98% standard. A brief written summary of significant statistical information is also included, as well as a graph comparing the Marine Corps averages of the current and previous semiannual periods with the standard.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? This audit is performed to find errors made by disbursing personnel. The results are directly attributable to their behavior. Specific errors are reported to the DO which made the error

to show how the error was determined. Since the error rate is objective, includes only errors which are caused by the DO, and is reported to both FD and the commanding general of the DO's command, the measurement is extremely controllable and motivates desired behavior.

(2) Distortability. Can the measurements be purposely reported improperly? For this audit, either an error exists or it doesn't. MCFC personnel determine the errors; they are not likely to be influenced to change the results or overlook error, since they are independent of the DOs. The measurements are not easily distorted.

2. MMPA Audit Analysis

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? This audit by MCFC of a sample of 75 accounts from each DO during one month each quarter is intended to determine the percentage of pay accounts which contain errors caused by DOs. Statistical sampling methods are used and estimated error rates are statistically determined from the sample data. But only certain types of errors can be determined by reviewing pay account printouts in a central location like the MCFC. Although the purpose of the audit is intended to be similar to the that of the PFR phase of MCDOSSET examinations, overall error rates determined by the MMPA Audit Analysis are consistently much lower than those determined by MCDOSSET.

The types of errors listed as reasons for over- and underpayments indicate that this audit actually measures only (or at least primarily) errors associated with a change in duty station. This audit does not appear to be a valid measurement of pay accounts containing all types of errors caused by DOs.

(2) Reliability. Is there inherent error in the measurement process? The inherent error in the sampling process is controlled statistically when the estimated total error rates are determined. The measurements are conducted by MCFC personnel using standard procedures to provide consistent results. However, since the audit does not identify all errors, even though it is apparently intended to do so, the measurement is biased and therefore unreliable as an indicator of MMPA accuracy. The true error rate in the overall pay system will be higher than the error rate determined by this audit, since not all errors are included.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? Errors are counted on a ratio scale and presented as a percentage of errors, also a ratio scale. A DO with 10 errors made twice as many mistakes as a DO with 5 errors; a DO with an error rate of 2% made errors twice as often as a DO with a 1% error rate.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? If the audit measures the rate at which DOs have made errors associated with a change in duty station, the information is relevant. Errors are labeled monetary and advisory, but, unlike the definition used for MCDOSSET, "monetary errors" include those resulting in potential as well as actual mispayments. Still, an error means an inaccurate payment has been or might be made. The information is, therefore, relevant to pay system accuracy.

(2) Understandability. Is the significance of the measurements easily understood? Because the measurement does not appear to be valid for its stated purpose, its significance is not easily understood. Appendix F contains a sample report which states "less than three percent (2.62%) of the active duty pay accounts in the master file contain potential monetary discrepancies." However, this audit does not measure all potential monetary errors, only those attributable to DOs and apparently only those associated with a change in duty station.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? The audits are performed by the same office using the same procedures each month; the results are therefore comparable

with those of other MMPA audit analyses. They are not comparable with MCDOSSET results, however, since the examination process and conditions are not similar.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? A standard has been set (currently 96% accuracy) for this part of the Disbursing Performance Standards Program to indicate acceptable performance.

(5) Reports. Are the measurements adequately reported to FD? Since the results of the audits apparently do not convey the information intended, the reports of those results are not useful. The reporting process itself is not at fault; the data are reported but not the information desired.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? The audits do determine errors caused by disbursing personnel, and the results are directly attributable to their behavior. Specific errors are reported to the DO which made the error to show how the error was determined. Since the error rate is objective, includes only errors which are caused by the DO, and is reported to both FD and the commanding general of the DO's command, the measurement is extremely controllable and motivates desired behavior.

(2) Distortability. Can the measurements be purposely reported improperly? As with the Analysis of Separated Marines' PFRs, these measurements are not easily distorted.

3. MCDOSSET Disbursing PFR Phase

This part of the Disbursing Performance Standards Program is discussed in Section A.1 above.

4. Analysis of Reenlistment Vouchers

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? The measurement of errors on reenlistment vouchers is intended to determine the percentage of vouchers which contain monetary errors caused by DOs (DO monetary error rate) as well as the percentage containing any errors, monetary or advisory, made by administrative and disbursing personnel (command error rate). Only the DO monetary error rate (converted to an accuracy rate by subtracting it from 100%) is used in the Disbursing Performance Standards Program; and this rate is only an estimate of the actual error rate and, therefore, of questionable validity.

Since a voucher may contain more than one error, the total number of errors is usually greater than the number of vouchers containing errors. A monetary error may result in more than one mispayment (payments can be made for a reenlistment bonus or for unused leave), so the total number

of DO monetary errors may be more than the number of vouchers containing these types of errors. Rather than keeping track of which vouchers contain DO monetary errors, an estimated error rate is computed by the following rationale: if 20% of the vouchers contain errors (the command error rate) and 10% of the total errors are DO monetary errors, then an estimated 2% ($10\% \times 20\%$) of the vouchers contain DO monetary errors. This rationale implies that monetary errors are distributed proportionately among the vouchers with errors. This is not necessarily true. For example, if 50 vouchers are audited, 15 errors of all types are found on a total of 10 vouchers, and 2 of the errors are DO monetary errors, the DO monetary error rate is determined to be 2.67% ($10/50 = 20\%$ of the vouchers contain errors; $2/15 = 13.33\%$ of the errors are DO monetary; so $13.33\% \times 20\% = 2.67\%$ of the vouchers contain DO monetary errors). In reality, the 2 DO errors could have occurred on 1 or 2 vouchers, so the true error rate is either 2% or 4%. Keeping track of the number of vouchers containing DO monetary errors would provide a much more valid measurement than the estimate now used.

(2) Reliability. Is there inherent error in the measurement process? The method of auditing is consistent. The use of an estimate, however, results in a biased or distorted measurement of the true DO monetary error rate, since there is no way to determine the amount of inherent error caused by the use of the estimate. In the above

example, the measured rate of 2.67% is either .67% higher or 1.33% lower than the true rate. Different examples would produce different ranges of inherent error. The overall reliability of the measurement must therefore be questioned.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? Errors are counted on a ratio scale and presented as a percentage, also a ratio scale. A DO with 2 monetary errors made twice as many mistakes as a DO with 1 error; a DO with an error rate of 4% made errors twice as often as a DO with a 2% rate.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? The existence of a DO monetary error means a loss of accuracy in the pay system. This information is relevant.

(2) Understandability. Is the significance of the measurements easily understood? The significance of the use of an estimate instead of the actual DO monetary error rate is not explained and therefore not easily understood.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? The audits are performed using the same procedures. The conditions resulting in the determination of an error rate, however, are not necessarily similar. Two DOs can have the same computed percentage of vouchers with DO monetary errors

even if the true percentages are different. In the above example, the same 2.67% error rate would be computed for an office which made one mistake on two different vouchers (a true rate of 4%) as for one which made two mistakes on one voucher (a true rate of 2%). Because the measurements are not totally valid, any comparisons must also be questioned. If the measurements were valid, they would be comparable.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? A standard has been set (currently 98%) for the DO monetary accuracy rate (100% minus the error rate) to indicate acceptable performance. An average Marine Corps command error rate is also computed, but no standard has been set for this measurement or for administrative performance.

(5) Reports. Are the measurements adequately reported to FD? The monthly report consists of a cover letter with the overall DO monetary and command accuracy rates and other significant statistical information. A table summarizes the data by DSSN, and graphs are included showing the DOs monetary accuracy rates compared with each other and the Marine Corps average (not the standard), the monthly average Marine Corps DO monetary and command error rates since April 1987, and other information concerned with reasons for monetary errors. Other enclosures provide details on the types and dollar values of errors. The main

points are included in the cover letter, and the summaries and graphs present the data in a manner fairly easy to understand. A lot of the detailed data appears to be of more use to MCFC analysts than to managers at FD.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? The results of the audits are directly attributable to the behavior of disbursing and administrative personnel. Specific errors are reported to the DO or administrative office which made the error to show how the error was determined. Since the DO error rate is objective, identifies which office caused the error, and is reported to both FD and the commanding general of the DO's command, this measurement is extremely controllable and motivates desired behavior. Measurement of administrative errors are not as controllable.

(2) Distortability. Can the measurements be purposely reported improperly? As with the other audits conducted by MCFC personnel, these measurements are not easily distorted.

C. OTHER REPORTS AND MISCELLANEOUS METHODS

1. Overpayments Processed by Separations Branch

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? This monthly

report is intended to identify the number and amount of overpayments at discharge and the primary reasons for the overpayments. It includes all overpayments, not just those resulting from an inaccurate final settlement payment or those caused by a DO. For example, the leading reason for an overpayment at discharge is the recoupment of a reenlistment bonus required when a Marine is discharged early, i.e., before the end of the period for which the bonus was paid. All PFRs are audited when a Marine is separated from active duty, a Marine is either overpaid or not, and the reason for the overpayment can be identified; the results present a valid measurement of the number of and reasons for overpayments.

(2) Reliability. Is there inherent error in the measurement process? There is no sampling error, and the measurements are made by MCFC personnel using standard procedures to provide consistent, reliable results.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? A ratio scale is used, so normal arithmetic comparisons can be made.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? The existence of an overpayment may or may not indicate that the pay system has been inaccurate or untimely. Marines who are discharged early can be overpaid because

monies must be recouped for unearned reenlistment bonuses or for advanced leave which becomes excess at discharge. The overpaid condition is the result of adjustments required by administrative policy decisions. These causes are not the result of an inaccurate or untimely pay system. But other reasons for overpayments include untimely stopping of allotments or of the direct deposit of payments (caused by a DO, an administrative office, or the inability of the computerized system to respond in time), untimely reporting of pay-related information by the administrative office before the DO calculates the final payment, and inaccurate calculation of the final payment by the DO (measured in the Analysis of Separated PFRs part of the Disbursing Performance Standards Program). These reasons for overpayments are the result of an inaccurate or untimely pay system. So, although the report is extremely useful in determining the amount and reasons for overpayments, only part of the information provided by this measurement of overpayments is relevant to pay system effectiveness.

(2) Understandability. Is the significance of the measurements easily understood? Overpayments at separation are easy to understand: the former Marine owes money to the Marine Corps which may or may not be recovered. The categories of overpayments (payments, bonus recoupments, etc.) are relatively easy to understand, although the source

(policies such as early discharge, untimely reporting by an administrative or disbursing office, or inaccurate computation by a DO) is not readily apparent.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? Yes. However, the measurements are not comparable with the results of the Analysis of Separated PFRs portion of the Disbursing Performance Standards Program, since that analysis is limited to only one source of overpayment.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? No goal or standard has been set for this report.

(5) Reports. Are the measurements adequately reported to FD? The monthly report consists of a cover letter with an analysis of significant data, such as the major categories of overpayments. Enclosures include a summarized listing of the dollar value of overpayments, according to category, for each month of the current fiscal year; tables of the number and amount of overpayments because of early discharges, according to category and month; and tables of overpayments identified by DOs rather than by MCFC personnel. The cover letter summarizes an analysis of the important information contained in the enclosures (except the total number and amount of overpayments). The report contains a lot of data. No graphs are used, so comparisons

of the data are difficult to visualize. Since PFRs are sent to the MCFC by DOs, some data are presented by DSSN; this presentation could be erroneously viewed as an implication that the DO is responsible for the overpayments.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? Only some of the measurement data are the result of the behavior of people in the pay system. As a whole, this measurement is not very controllable.

(2) Distortability. Can the measurements be purposely reported improperly? As with the other audits conducted by MCFC personnel, these measurements are not easily distorted.

2. Analysis of Out-of-Balance MMPAs

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? This measurement from a computer data base inquiry provides data on MMPAs which have been out-of-balance for a period of nine months or longer. The term "out-of-balance" means that at the end of a month the MMPA reflects a either a positive or negative balance of \$50 or more. This does not mean that a Marine has been over- or underpaid for at least nine months; it probably means that the DO has been manually adjusting the computer-generated payment data. There can be many reasons for the

adjustment which are not determinable from the measurement process. This analysis is a valid measurement of MMPAs which are "out-of-balance", since that is strictly a condition related to data in the computer data base. It is not a valid measurement of mispayments.

(2) Reliability. Is there inherent error in the measurement process? There is little or no inherent error; the data are generated by a computer program.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? The data are measured using a ratio scale, so normal arithmetic comparisons can be made.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? The existence of an out-of-balance account does not necessarily mean a payment has been inaccurate or untimely. It does mean that the MMPA data have been manually overridden, presumably because the data are inaccurate and manual adjustments are necessary to make correct payments. Data on individual accounts are provided as a management tool to the DOs maintaining those accounts. Monthly summaries of those data are provided to FD. The DOs can determine the reason for the out-of-balance conditions, but this information is not required to be reported and is not provided as part of the report. The data may be relevant to an

individual DO in helping to monitor the functioning of the office (e.g., to make sure that manual adjustments are in fact necessary). Without specific information on the reasons for the out-of-balance conditions, however, this measurement is not relevant to overall pay system accuracy or timeliness.

(2) Understandability. Is the significance of the measurements easily understood? A negative MMPA balance normally means that a Marine has been overpaid, and a positive balance that the Marine is underpaid. But these conditions could also mean that data in the MMPA are incorrect, i. e. the Marine has been paid correctly but the data in the computer pay account are wrong. Normally, the Marine will be paid according to the data in the MMPA alone, but if the data are incorrect for more than 60 days, DOs are authorized to adjust the data and pay the correct amount. If the MMPA is out-of-balance for nine months or longer, the likelihood is that the condition exists because the MMPA data are wrong and manual adjustments have been required to prevent over- and underpayments. The significance of the out-of-balance condition is not easily understood.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? Yes.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? No standard has been set.

(5) Reports. Are the measurements adequately reported to FD? The monthly report presents negative balances as "overpayments" and positive balances as "underpayments." Since the out-of-balance condition does not necessarily mean a mispayment has occurred, this is not a true representation of the meaning of the measurement. "Error rates" and "accuracy rates" are shown, but these terms are not explained. The existence of an out-of-balance account does not necessarily indicate that an error has been made by the DO, so the term "error rate" is not appropriate here. A lot of data are presented, but their meaning is misrepresented.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? The reason for an out-of-balance MMPA may be beyond the control of DO personnel (e.g., a computer program deficiency may have caused the condition). The measurement is not very controllable by DOs.

(2) Distortability. Can the measurements be purposely reported improperly? Since the measurement is strictly a data base inquiry, it cannot be easily distorted. An out-of-balance MMPA can be prevented by paying strictly according to the data in the MMPA, whether or not the data are correct. Even if this were done, the measurement of out-of-balance accounts would still be correct, since it is not a measurement of accuracy but one of data.

3. LES Sample Audits

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? The main purpose of these audits is to determine if system deficiencies (mistakes in computer system design or programming) which have not already been identified are causing errors in pay accounts. Another measurement made is the percentages of errors attributable to the system, the administrative office (identified as commanding officer or CO errors), or the DO. DOs perform the audit and notify the MCFC of any errors found in the sample of LESs and whether the errors were caused by the computer system, the DO, or the administrative office. The MCFC determines if the errors which the DO attributes to the system are in fact caused by system deficiencies and whether or not those deficiencies had been previously identified.

The measurements made from the results of the audit itself (i.e., the number of each type of error) are not necessarily valid. The total number of errors found is probably a valid representation of error conditions identifiable by a DO from the data on the LES; but the number of each type of error cannot be determined until after the MCFC has determined if the "system" errors reported by the DOs are actually caused by computer deficiencies.

(2) Reliability. Is there inherent error in the measurement process? The audit process is not necessarily consistent between DO personnel at the same office, among the different DOs, or from one month to the next. The audits are performed by personnel of varying amounts of knowledge and experience. A highly knowledgeable and experienced person will find more errors and identify the correct type of error more often than one who is less knowledgeable or experienced. The audits are often performed under time constraints which cause further inconsistencies.

The measurement is also biased if it is used to determine the total percentage of errors in the pay system; many errors (such as the failure of an administrative office to report certain data) cannot be determined by the DO during the audit of LESSs. The error rate determined during these audits is, therefore, lower than the "true" error rate in the overall pay system. These audits do not appear to provide very reliable measurements of overall error rates in the pay system.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? The measurements are made on a ratio scale, so normal arithmetic comparisons can be made.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? The existence of an error identified by these audits means that the data in the pay account are inaccurate. The cause of that error is also relevant. Although the audits provide useful information to help MCFC identify system deficiencies, the relevance of the information they provide must be questioned because the measurements are not very valid or reliable as indicators of overall accuracy. If the data were valid and reliable, they would then be relevant.

(2) Understandability. Is the significance of the measurements easily understood? An error identified by these audits does not necessarily indicate that a Marine has been mispaid; erroneous data may exist in the pay account, which data might cause a mispayment in the future or might not directly affect payments. This is not clear. System errors as identified by DOs may or may not be caused by actual system deficiencies; the data must be analyzed by the MCFC before that determination can be made. Of the actual system errors, only some were caused by "new" system deficiencies, ones that were not previously identified. This information is not readily apparent.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? The same basic process is used to audit the LESSs, although the level of expertise of the personnel performing the audits varies. An office which uses a team of experienced personnel (such as the DO quality assurance section) to audit the LESSs will provide higher quality information to the MCFC than an office which doesn't. The time frame allowed for performing the audit also varies from month to month and from DO to DO. Comparability must therefore be questioned.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? No standard has been set.

(5) Reports. Are the measurements adequately reported to FD? The report (Appendix J) consists of a cover letter which highlights the main points and provides results of a statistical analysis. Enclosures contain a table summarizing the number, type, and percentage (error rate) of errors by DSSN, a listing of system errors reported by the DOs, and the results of the MCFC analysis of these errors (i.e., whether or not the error was really caused by a system deficiency, whether or not it was previously discovered, and what action is being taken to correct the deficiency). The report identifies a "system error rate" as the percentage of accounts with system errors as determined by the DO, not after the final determination of the MCFC. Although the main

purpose of the audit is to determine if new system deficiencies are causing errors, the report does not break down the system error data into "new" and "old" categories.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? The errors caused by system deficiencies are not the result of the behavior of administrative or disbursing personnel. The CO and DO type errors are. Since the main purpose of the audit is to find system deficiencies, the audits would not be considered very controllable by administrative and disbursing personnel.

(2) Distortability. Can the measurements be purposely reported improperly? Yes. DO personnel may be hesitant to report errors caused by the DO. They may also provide erroneous data on all errors because of improper or hasty auditing, especially if they are under a time constraint to complete the audit. The measurements appear to be highly distortable. Of course, this does not mean that the likelihood of purposeful misrepresentation is high, only that the possibility to do so exists.

4. SAO Quarterly Status Report of JUMPS/MMS Deficiencies

a. Measurement Quality

(1) Validity. Do the measurements really describe what they are supposed to describe? SAO messages and the quarterly status report do not actually "measure" anything, but they do provide information on computer system

deficiencies which are valid descriptions of the deficiencies. The number of SAO messages which are released and the number of deficiencies listed in the report may provide a valid measurement of the number of deficiencies, but they do not by themselves measure the impact of those deficiencies on the pay system; i.e., they do not indicate the number of pay accounts affected or the dollar amount of any mispayments which might occur. Estimates of this information are made at the MCFC on a Project Analysis/Evaluation (PAE) form for each discrepancy as an aid in determining if the deficiency should be corrected immediately or, if not, in prioritizing its correction. These measurements are "best guess" estimates made by using data retrievals, management reports, and other information available to the analysts at the MCFC. Although exact figures cannot be obtained, the PAE estimates appear to be the best measurement of the potential loss of pay system effectiveness if system deficiencies are not corrected. However, these measurements are not summarized and reported to management.

(2) Reliability. Is there inherent error in the measurement process? The number of SAO messages and the number of deficiencies listed on the Quarterly Status Report is a reliable measurement of the number of deficiencies but not their impact. The measurement of their impact (i.e., the

data on the PAEs showing the population affected and dollar value of potential mispayments) is relatively consistent; the same procedures are used to provide estimates.

(3) Meaningfulness. What meaningful numerical statements can be made about the measurements? Ratio scales are used, so normal arithmetic comparisons can be made.

b. Measurement Usefulness

(1) Relevance. Is the information provided by the measurements relevant to overall pay system accuracy or timeliness? SAO messages and the quarterly status report provide information on computer system deficiencies. Some deficiencies cause errors which have resulted in inaccurate or untimely pay; others would cause inaccuracies if they were not corrected or if manual adjustments were not made to override the computer-generated payment data. Measurements of these deficiencies are, therefore, relevant to the effectiveness of the overall pay system.

(2) Understandability. Is the significance of the measurements easily understood? The SAO messages and the Quarterly Status Reports by themselves probably do not provide enough information to fully understand the significance of deficiencies in the automated system. Information which could be provided by summarizing and reporting the data on PAEs would add substantially to the understandability of these measurements.

(3) Comparability. Are the measurements made using the same processes and under similar conditions? The PAE estimates are computed using the same procedures.

(4) Standards. Can the measurement be compared to a goal or standard to indicate if an acceptable level of performance is being achieved? No standards have been set to indicate an acceptable number of deficiencies or define acceptable performance of the automated portion of the system.

(5) Reports. Are the measurements adequately reported to FD? Although individual SAO messages are sent to FD, no summarized reports are provided. The Quarterly Status Report does not contain a summary of the data in the listing. Relevant information on PAEs are not reported at all.

c. Motivational Characteristics

(1) Controllability. Can the conditions being measured be affected by people's behavior? Deficiencies are caused by mistakes in system design and programming, actions performed by people. The connotation of "computer system deficiency," however, is an error made by the computer, not by people. Errors caused by disbursing and administrative personnel are usually linked to those personnel; they are motivated to perform better because the measurements are considered reflections on their performance. Errors caused by computer design and programming personnel, however, are usually associated with the computer. There is no direct

link between the measurements and the people who made the mistakes, so the measurement process itself does not necessarily motivate better performance; the errors are not controllable.

(2) Distortability. Can the measurements be purposely reported improperly? These measurements are not easily distorted. Once a deficiency is known to exist, all pertinent information about that deficiency will likely be reported.

5. Other Reports and Miscellaneous Methods

The quality, usefulness, and motivational capabilities of the other reports and methods used by FD to gauge pay system effectiveness will not be analyzed here. GAO, NAS, and ad hoc reports are unique; their characteristics depend on the specific report and would have to be examined individually. Different requirements for conducting the annual system manager/user review have been established each year, so the characteristics of each review would have to be examined separately. Verbal and written feedback from the MCFC, MCDOSSET, and individual DOs provide a lot of information, but its quality and usefulness must be established separately for each piece of information obtained. The number of complaints may or may not indicate a loss of pay system effectiveness; each complaint has to be judged on its own merit.

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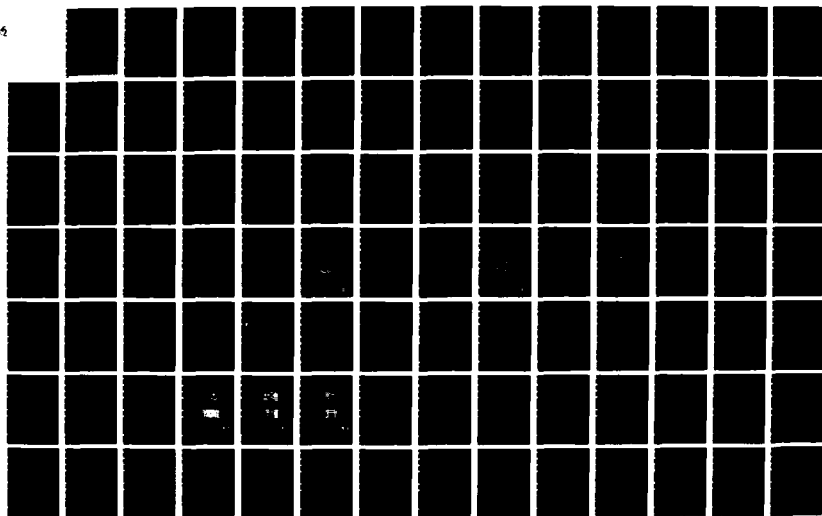
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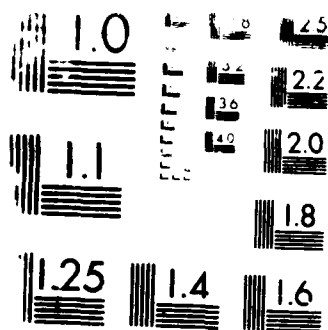
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Although no attempt has been made here to analyze these methods of measuring effectiveness, it is important to perform some similar evaluation before relying on them. Analysis can and should be done on an individual basis; otherwise decisions may be made using information which is not appropriate for the particular situation.

V. CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusions of the thesis and answers the primary question presented in Chapter I: Do current measurement techniques provide top-level financial management officials with sufficient information to adequately monitor pay system performance? The answer is no, not yet. The measurement and reporting processes do not now provide the information which appears to be needed. Conclusions will be presented to support this part of the answer. But the measurement techniques, with some modifications, are capable of providing sufficient information. At the end of the chapter, several recommendations will be made to help improve the effectiveness measurement system.

A. CONCLUSIONS

The Marine Corps military pay system is comprised of people, procedures, and computers. The effectiveness of the system depends on the proper functioning of all three parts. The accuracy and timeliness of pay are the system's major goals; measuring these attributes determines how effective the system is. An effectiveness measurement system should, therefore, measure the extent to which the people, the procedures, and the computer contribute to accuracy and

timeliness. Do the current methods of measuring effectiveness do this adequately? Not entirely, as the following discussion shows.

1. People

The performance of people is measured in a number of ways. The MCDOSSET examinations are the most thorough measurement of this part of the pay system. These examinations provide quality measurements which, for the most part, are extremely useful for determining and monitoring effectiveness. There are perhaps three areas of the MCDOSSET program lacking in usefulness. First, the program is almost entirely set up to measure the performance of individual commands rather than the overall pay system. Administrative and disbursing office statistics are computed separately, and individual reports are not adequately consolidated to determine an overall error rate. This is not necessarily bad, but it limits the reports' usefulness in measuring overall performance. Second, there is no standard (not even an implicit standard such as "satisfactory" or "unsatisfactory") for the internal control phase of the examination, nor is there an attempt to provide a measurement of the effectiveness of internal controls for the pay system as a whole. Third, although timeliness is a major goal and aspects of timeliness are measured as part of the internal control phase, no overall timeliness measurement is reported.

The Disbursing Performance Standards Program provides measurements of disbursing personnel performance. There is no similar measurement of the performance of administrative personnel, even though they report most of the information into the pay system. The MMPA Audit Analysis does not measure what it is intended to measure. The Analysis of Separated Marines' PFRs and the Analysis of Reenlistment Vouchers provide measurements of only disbursing performance in these areas: a 2% published error rate does not necessarily mean there are only 2% errors, because errors caused by the administrative office are not included. This fact is not easy to understand. Thus, computation of the error rate for the reenlistment voucher analysis is less than desirable.

The other reports also provide information on the performance of people, but not all of it is necessarily useful as a measure of effectiveness. Part of the Overpayments Processed by the Separations Branch report is relevant to pay system effectiveness, but this part is not broken out separately. The MMPA Out-of-Balance report does not appear to be relevant at all; at least, any part that may be relevant cannot be determined from the report itself. The LES Sample Audit report shows data on CO and DO type errors -- people performance -- which attempt to provide information similar to that in the MCDOSSET service record and PFR phases. MCDOSSET does a much more accurate job.

In summary, there are a lot of useful measurements of people performance being made. The methods of measuring and reporting tend to place the major emphasis on the performance of individual commands rather than the overall pay system. Some of the measurements are not really relevant to overall pay system accuracy or timeliness and should not be used as an indication of effectiveness.

2. Procedures

There is only one real measurement of the procedures part of the pay system: the internal control phase of MCDOSET. Since there is no standard for this phase, it is difficult to determine if the effectiveness of the procedures is or is not acceptable, especially for the system as a whole. The MCDOSET examinations only determine if the procedures of field commands comply with those required by regulations; there is no measurement of the effectiveness of the regulations themselves. The MCDOSET method of measuring procedures may be subjective, but it is probably the best measurement that can be made.

3. Computer

The accuracy of the computer is touched upon in three separate areas. As part of the MCDOSET PFR phase, errors caused by system deficiencies and not corrected by the DO are determined. These are "chargeable" to the DO, but they provide one measurement of computer accuracy. This information is not readily identifiable or explained. The LES

Sample audits, with the MCFC analysis, provide information on errors caused by computer deficiencies. The reports may be misleading, however, because the data shown on the reports are consolidated before the MCFC finishes its analysis. SAO messages and Quarterly Status Reports also provide information, but specific data on the PAEs which would be extremely useful in measuring effectiveness are not reported. In short, the contribution of the computer to the accuracy and timeliness of pay is measured sufficiently, but the information that is reported is either misleading or incomplete.

B. RECOMMENDATIONS

1. MCDOSET

a. Consolidated information gathered during the MCDOSET examinations should be presented in a report showing the effectiveness of the overall pay system, in terms of accuracy and timeliness as measured by MCDOSET. Administrative and disbursing office effectiveness, as measured by both teams in the service record/PFR and internal control phases, should be consolidated at a summary level and reported to FD at least quarterly.

b. A standard should be set for the measurement of internal controls, and a method for measuring overall effectiveness for these phases should be determined.

c. A method for showing the results of timeliness measurements should be developed, a standard established, and the results reported separately as a major item on the report.

2. Disbursing Performance Standards Program

a. A determination should be made of exactly what the MMPA Audit Analysis measures, and it should be described accurately on the report. If this can't be done, delete the report from the program. This doesn't necessarily mean to stop the analysis, since it does uncover errors which should be corrected. But it shouldn't be used as part of a performance measurement program if one cannot determine exactly what performance is being measured.

c. A lot of the detailed data should be deleted on the individual reports of the Analyses of Separated Marines PFRs and Reenlistment Vouchers; instead, summarize the information quarterly and provide an analysis of error trends at that time.

d. The error and accuracy rates for the Analysis of Reenlistment Vouchers should be correctly computed, even if this means changing the audit process slightly. If the measurement is to be used in the Performance Standards Program, it should be accurate.

3. Other Reports

a. The Overpayments Processed by the Separation Branch report should be reformatted to separate the overpayments attributable to the pay system from those that are not, or this information should be reported separately.

b. The MMPA Out-of-Balance Report should be deleted. Individual DOs may need the reports for management purposes, but it serves no useful purpose as a measurement of effectiveness.

c. In the LES Sample Audits, the requirement for keeping statistics on "CO and DO type errors" should be deleted. MCDOSET provides similar information more accurately. "System error rates" should not be shown until after the MCFC analysis determines the DO-reported errors are in fact caused by system deficiencies. Separate statistics should be maintained on "new" and "previously identified" deficiencies.

d. A summary of the information contained in the SAO messages and Quarterly Status Report should be provided. For example, in the quarterly report, a table could be provided showing the number of system deficiencies identified during the previous quarter, the number corrected, the number scheduled for correction, and the number still unresolved.

e. The PAE estimates of the number of pay accounts affected and the dollar amount of mispayments should be summarized and reported. The actual and potential mispayment

data should be reported separately. Although these data are only estimates of actual or potential mispayments (i.e., some of the errors and mispayments will not actually occur since the deficiencies will be corrected or manually overcome), they are the best quantified information concerning the impact of deficiencies in the computer system. A method should be devised to assign an estimated error or accuracy rate using these data.

4. Administrative Performance Standards

A counterpart to the Disbursing Performance Standards Program which measures administrative performance should be developed. If this recommendation is not feasible, at least measure some areas of administrative performance for the pay system as a whole. In other words, instead of sampling records from and maintaining statistics on individual administrative offices, as is done for disbursing offices, develop measurement methods which will indicate overall system performance in specified areas. Even if responsibility for errors is not fixed, FD will have an indication that things are or are not right with overall administrative performance. More research can be done if major problems are uncovered.

5. Report of Pay System Effectiveness

All the measurements of overall pay system effectiveness should be combined into a single quarterly or semiannual report. Data on individual offices would not be shown, only

the "bottom line" measurements indicating the accuracy and timeliness of the various parts of the overall pay system. This report would provide the FDMC with a concise measurement of the effectiveness of the Marine Corps military pay system.



APPENDIX A
UNITED STATES MARINE CORPS
DISBURSING ON-SITE EXAMINATION TEAM, WEST COAST
MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA 92035-5100

IN REPLY REFER TO:

7220.13D-31
03W
11 Jun 1986

From: Officer-In-Charge
To: Commandant of the Marine Corps, Headquarters, United States Marine Corps (Code FDD), Washington D. C. 20380
Via: Commanding General,

Subj: REPORT OF DISBURSING ON-SITE EXAMINATION

Ref: (a) MCO 7220.13D
(b) CMC ltr 7250 FDD-jtt dtd 7 Mar 86

Encl: (1) Findings and Recommendations - Administrative Examination
(2) Summary of SRB Phase
(3) Summary of Internal Control Phase - Administrative
(4) Graph Summary of Administrative Error Rates
(5) Findings and Recommendations - Disbursing Examination
(6) Summary of PFR Phase
(7) Statistical Analysis of SRB/PFR Phase

1. The Marine Corps Disbursing On-Site Examination Team, West conducted the examination directed by references (a) and (b) from 21 April through 21 May 1986.
2. The purpose of the examination was to evaluate the disbursing function and that portion of the administrative function concerned with military pay and allowances to determine compliance with applicable regulations. The examination included a detailed review of a random sample of personnel records as well as a comprehensive review of the internal control measures used in administering the Joint Uniform Military Pay System/Manpower Management System (JUMPS/MMS).
3. Administration. Our evaluation revealed that 16 percent of the personnel records we examined contained monetary errors that resulted in mispayments. We also found that 11 percent of the personnel records contained advisory errors that could result in mispayments if not corrected. Internal controls, policies, and procedures for the most part complied with the requirements of applicable regulations and directives. Some internal control measures, however, need to be strengthened, particularly in the areas of unit diary reporting (timeliness) promotion procedures, and TAD rations (DOPMA BAS). Deficiencies noted during the administrative portion of our examination are presented in enclosure (1). Enclosures (2) through (4) further detail the results of the administrative examination.
4. Disbursing. Our examination also revealed that three percent of the personnel records we examined contained monetary errors chargeable to the disbursing officer that resulted in mispayments. We also found that less than one percent of the personnel records contained advisory errors that could result in future mispayments if not corrected. Internal controls, policies, and procedures in support of disbursing operations were substantially compliant with the requirements of applicable regulations and directives. Deficiencies noted during

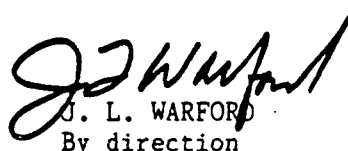
Subj: REPORT OF DISBURSING ON-SITE EXAMINATION

our examination are presented in enclosure (5). Enclosure (6) further details the results of the disbursing examination.

5. Enclosure (7) provides a statistical analysis of the errors detected during the personnel records examination.

6. We discussed the results of the examination with the Chief of Staff including the deficiencies and recommendations contained in this report. We provided the Disbursing Officer and each Commanding Officer a discrepancy notice for each error detected during the review of personnel records. We advised them that each error must be corrected, the discrepancy notice endorsed, and returned to this office within 30 days. Additionally, we furnished them copies of the checklists used to evaluate internal controls and advised them that any discrepancy listed, whether or not significant enough to be included in this report, should be corrected.

7. Reference (b) requires that the command endorse this report within 60 days stating specific action taken or planned, along with anticipated completion dates to correct the problem areas identified in enclosures (1) and (5). Comments must be submitted for each recommendation provided. A copy of the endorsement should be forwarded to this office.


J. L. WARFORD
By direction

Copy to:
Regional Manager, USGAO
DisbO, III MAF
MCFC (Code QA)
MCDOSSET-East

FINDINGS AND RECOMMENDATIONS - ADMINISTRATIVE EXAMINATION

I. SCOPE: The administrative examination was conducted in two parts, a personnel service record examination and an internal control examination.

A. Internal Record Phase. This portion consisted of a review of a random sample of the personnel records to detect errors caused by the administrative section and unresolved errors for which the administrative section must initiate corrective action. The sampling design was based upon past and anticipated Marine Corps error trends with a desired sample precision of plus or minus 2.5 percent.

B. Internal Control Phase. This portion involved a comprehensive review of internal control procedures and determinations if those procedures were in compliance with Marine Corps directives. This phase consisted of a review of service records (OQR/SRB); unit diaries (UD); unit transaction registers (UTR); unit punishment books (UPB); pending transaction registers (PTR); correspondence files; internal control systems; control logs; compliance with the Marine Corps pay policy; promotion procedures; leave procedures; extensions/reenlistments, and the effectiveness of the join and monthly LES audits.

C. Errors Defined:

1. Monetary Errors. Monetary errors are those that have resulted in an actual overpayment or underpayment to a Marine. When corrective action is taken the Marine will likely see a change in pay. These errors comprise your command's "official" error rate.

2. Advisory Errors. Advisory errors are errors which could cause potential mispayments, reporting errors not yet affecting pay, and policy and procedural violations. Potential values, where appropriate, are shown to emphasize the significance of these errors.

II. FINDINGS AND RECOMMENDATIONS.

A. Variable Housing Allowance (VHA). This category contributed 25 percent of all monetary errors and eight percent of all advisory errors detected and involved:

1. Starting the entitlement on a date other than the day of reporting.
2. Reporting an incorrect zip code
3. Not reporting or incorrectly reporting a termination of the entitlement when the dependents join the Marine at
4. Not crediting VHA at the old permanent duty station location rate from the date of marriage of the Marine until the day prior to the date of reporting to
5. Failure to credit VHA at the old duty station rate when the Marine dispossessed government quarters at the old duty station.

FINDINGS AND RECOMMENDATIONS - ADMINISTRATIVE EXAMINATION (Cont)

These errors were caused by inattention to detail by the administrative personnel and, in some cases, the inability of the clerks to recognize an error condition in the entitlement to VHA. Since the conditions of entitlement to VHA differ somewhat when the Marine is located particular attention is needed to understand the instructions contained in the JTR, Chapter 4, Part L. The clerks must be able to recognize that a change in the VHA rate may be indicated when the Marine updates his Record of Emergency Data (RED) with a new dependent location, or applies for Commuted Rations because he resides with his family. Additionally, the joining audit must be thorough enough to detect prior periods of entitlement to VHA, such as a Marine that marries enroute to . These errors can cause incorrect payments to Marines.

Recommendation #A-1. That the personnel officers review their internal controls to highlight those situations where an individual Marine notifies the command of a change in the service record, and that change could effect VHA. Also, the personnel chiefs should review the reference cited and thoroughly instruct all administrative clerks on the varying conditions of entitlement to VHA. This instruction should be a portion of the ongoing technical training for administrative clerks.

B. Family Separation Allowance (FSA). This category contributed 23 percent of all monetary errors detected and involved a variety of situations of entitlement and non-entitlement to FSA. The reasons for these errors were due primarily to inadequate research during the auditing process of the monthly LES and a failure of supervisory personnel to detect the incorrect information during the review of the unit diary. These problems further stem from the relative inexperience administrators have in administering some pay and allowances. This is true especially for those entitlements that have been recently given to the commanding officer for reporting, that were traditionally reported by the disbursing officer. The inability to recognize periods of entitlement or non-entitlement to FSA has resulted in Marines being mispaid. (Ref: DODPM, Part 3, Chap 3; and PRIM, para 8052)

Recommendation #A-2. That the personnel chiefs, as part of the continual technical training program, instruct all clerks on the conditions of entitlement to FSA. If additional assistance is needed, periods of instruction should be coordinated with the local disbursing officer. Additionally, the personnel officers should pay particular attention to FSA entries when reviewing the unit diary for accuracy.

C. TAD Rations (DOPMA BAS). This entitlement was primarily responsible for 23 percent of all monetary errors detected in the Commuted Rations/Basic Allowance for Subsistence category and mainly dealt with the drivers of

Battalion not being credited DOPMA BAS when they made trips away from . Since Marines must subsist at their own expense while TAD away from the permanent duty station, a failure to report the credit, or reporting it incorrectly on the unit diary, causes incorrect payments for those Marines not receiving a subsistence allowance at the permanent duty station. (Ref: PRIM, para 8008 and Table 8-3)

Encl (1)

FINDINGS AND RECOMMENDATIONS - ADMINISTRATIVE EXAMINATION (Cont)

Recommendation #A-3. That the personnel officer have the motor transport chief provide him with a list of names, dates, and times, at least weekly (to prevent late reporting) of all Marines performing duty away from This roster would then be used to substantiate the unit diary.

D. Cumulative Career Sea Time. This item contributed 27 percent of all advisory errors noted and involved a failure to report or incorrectly reporting on the unit diary all periods of sea service for individual Marines. Unit diary entries were not reported because of an oversight by supervisory personnel. A failure to report or incorrectly reporting cumulative career sea service could cause incorrect payments for Marines who serve aboard a naval vessel in the future. (Ref: SECNAVINST 7220.77B; and DODPM, Part 1, Chapter 7)

Recommendation #A-4. That personnel officers make sure join audit procedures include screening the service records for possible periods of sea service. This screening procedure should include an interview with the individual Marine to identify all possible periods of sea service. Once all periods are identified they should be reported on the unit diary as shown in the PRIM, paragraph 8010.5.

E. Unit Diary Reporting (Timeliness). A review of eight pay-related unit diary entries, conducted within each unit, revealed a significant percentage of entries being reported in excess of ten days after the action had occurred. This deficiency was caused by slow document flow and poor managerial techniques within the administrative offices. This results in late chackages and credits to the master military pay account. (Ref: PRIM, par. 1401.2a)

Recommendation #A-5 That the personnel officers set up internal control procedures to make sure that all reportable information is routed to the unit diary section for input on a daily basis. There is no standardized procedure for this, however, each unit must set up a system and strictly adhere to it. Supervisors must be familiar with this system and conduct periodic checks to make sure it is functioning properly.

F. Promotion Procedures. During a review of the unit diaries it was discovered that numerous promotions were reported in excess of ten days after the effective date of the promotion. This problem was caused by the following procedural deficiencies:

1. Training information necessary for computation of automated composite scores was not being submitted to the unit diary in a timely manner. This results in inaccurate or no composite scores being computed and consequently Marines not being promoted when eligible.

2. Commands not screening records of eligible Marines in sufficient time to allow for preparation and certification of warrants and timely delivery of copies of warrants to the unit diary section for input. This delay resulted in Marines not receiving increased pay and allowances in a timely manner.

Recommendation #A-6. That the personnel officers establish procedures that provide for the screening of records of eligible Marines the month prior to the month of eligibility. Once all eligible and recommended Marines are identified,

FINDINGS AND RECOMMENDATIONS - ADMINISTRATIVE EXAMINATION (Cont)

warrants should then be prepared, certified, and routed to the unit diary section for input on the first day of the month of promotional eligibility. We also recommend that all required training data be compiled and reported on the unit diary prior to the established cut-off date for computation of automated composite scores.

SUMMARY OF SRB PHASE

I. EXAMINATION SUMMARY

Service records available for examination	5645
Number of records examined	468
Percent of command coverage	8%
Number of second notices issued	0

II. Monetary Error Summary. Monetary errors are those that have resulted in an actual overpayment or underpayment to a Marine. When corrective action is taken the Marine will likely see a change in pay. These errors comprise your command's "official" error rate.

Total number of monetary errors	115
Number of records which contained errors	73
Percentage of records with errors	15.60%

<u>Areas</u>	<u>Number of Monetary errors</u>			<u>Actual Monetary Values</u>		
	<u>Over- Payments</u>	<u>Under- Payments</u>	<u>Total</u>	<u>Over- Payments</u>	<u>Under- Payments</u>	<u>Total</u>
<u>Variable Housing Allowance:</u>						
a. Entitled/not entitled	14	15	29	\$ 2419.66	\$ 1576.21	\$ 3,995.87
<u>Family Separation Allowance:</u>						
a. Entitled/not entitled	16	11	27	\$ 603.03	\$ 908.00	\$ 1,511.03
<u>ComRats/BAS:</u>						
a. ComRats not reported	-	1	1	\$-----	\$ 171.93	\$ 171.93
b. ComRats retroactive approval	<u>3</u>	<u>22</u>	<u>25</u>	<u>\$ 113.51</u>	<u>\$ 1,043.82</u>	<u>\$ 1,157.33</u>
	3	23	26	\$ 113.51	\$ 1,215.75	\$ 1,329.26
<u>Career Sea/Foreign Duty Pay:</u>						
a. Commencement/termination not/ incorrectly reported	8	4	12	\$ 52.78	\$ 103.24	\$ 156.02
<u>Basic Allowance for Quarters:</u>						
a. Partial BAQ	-	1	1	\$-----	\$.48	\$.48
b. Entitled/incorrectly reported	<u>-</u>	<u>5</u>	<u>5</u>	<u>\$-----</u>	<u>\$ 114.33</u>	<u>\$ 114.33</u>
	-	6	6	\$-----	\$ 114.81	\$ 114.81
<u>Leave:</u>						
a. Not re-reported	-	1	1	\$-----	\$ 83.36	\$ 83.36
b. Incorrectly reported	<u>1</u>	<u>1</u>	<u>2</u>	<u>\$ 15.63</u>	<u>\$ 20.84</u>	<u>\$ 36.47</u>
	1	2	3	\$ 15.63	\$ 104.20	\$ 119.83
<u>Bonus:</u>						
a. Entitled/not entitled	2	2	4	\$ 7,144.54	\$ 4,000.00	\$ 11,144.54
<u>Station Allowance:</u>						
a. Entitled/not entitled	1	1	2	\$ 183.48	\$ 2.89	\$ 186.37

SUMMARY OF SRB PHASE (Cont)

II. Monetary Error Summary (Cont)

<u>Areas</u>	<u>Number of Monetary errors</u>			<u>Actual Monetary Values</u>		
	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>Total</u>	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>Total</u>
<u>Pay Entry Base Date:</u>						
a. SRB and LES disagree	1	-	1	\$ 1.52	\$-----	\$ 1.52
<u>Time Lost:</u>						
a. Not reported	1	-	1	\$ 236.86	\$-----	\$ 236.86
<u>Grade:</u>						
a. Not reported	-	1	1	\$-----	\$ 33.54	\$ 33.54
<u>Courts Martial/NJP:</u>						
a. Erroneously reported	1	-	1	\$ 358.00	\$-----	\$ 358.00
<u>Clothing Maintenance Allowance:</u>						
a. RCMA incorrectly reported	-	1	1	\$-----	\$ 2.40	\$ 2.40
<u>Miscellaneous Administrative Discrepancies:</u>						
a. Adv Pay not entl	1	-	1	\$ 229.50	\$-----	\$ 229.50
 TOTAL MONETARY ERRORS	 49	 66	 115	 \$11,358.51	 \$ 8,061.04	 \$19,419.55

III. Advisory Error Summary. Advisory errors are errors which could cause potential mis-payments, reporting errors not yet affecting pay, and policy and procedural violations. Potential values, where appropriate, are shown to emphasize that they may be as important, or more important, than actual monetary errors.

Total number of advisory errors	59
Number of records with advisory errors	51
Percentage of records with advisory errors	10.90%

<u>Areas</u>	<u>Number of Advisory Errors</u>				<u>Potential Monetary Values</u>		
	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>No Money</u>	<u>Total</u>	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>Total</u>
<u>Career Sea/Foreign Duty Pay:</u>							
a. Cumulative CarSea time not/incorrectly reported	-	-	16	16	\$-----	\$-----	\$-----

SUMMARY OF SRB PHASE (Cont)

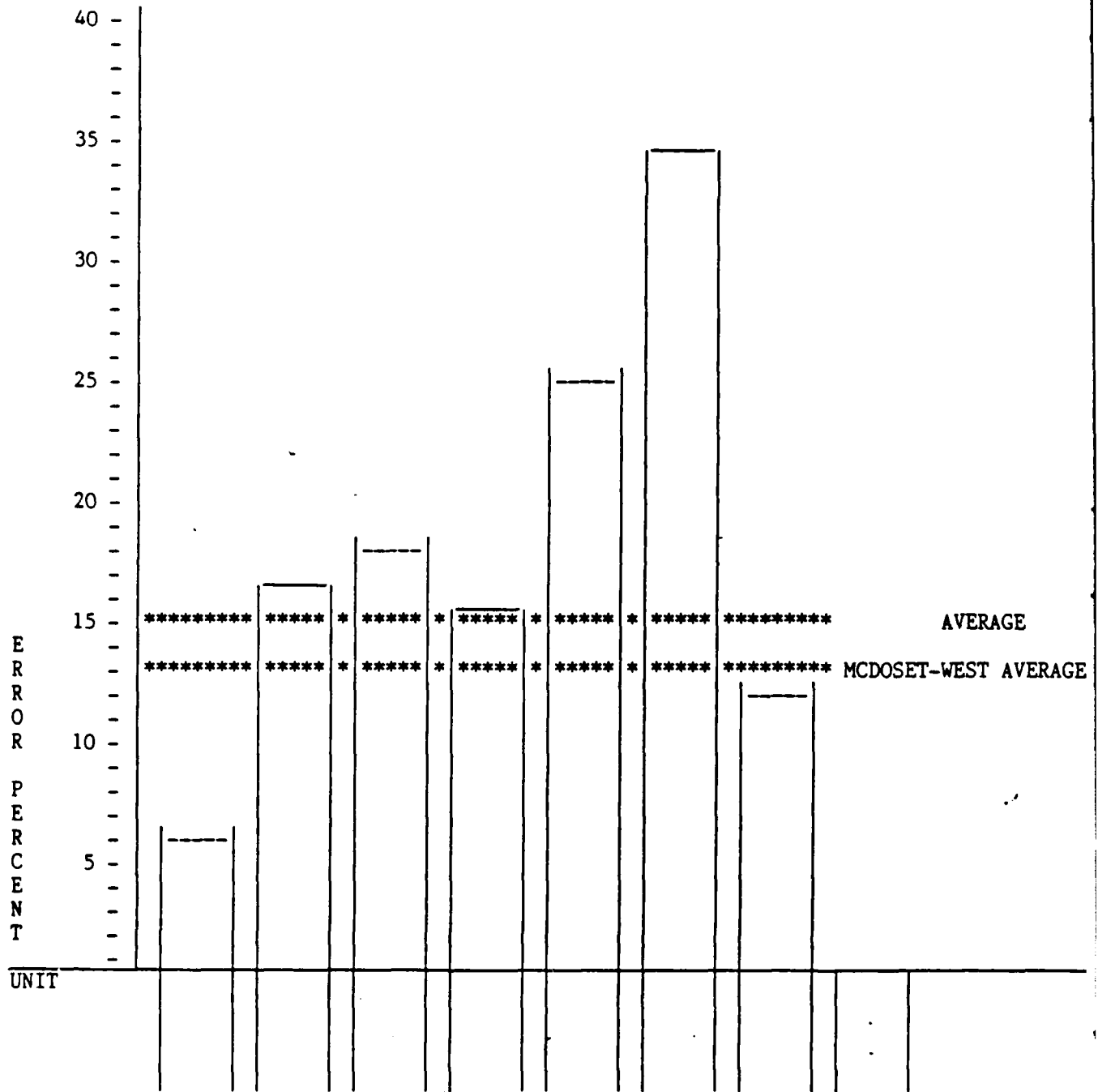
III. Advisory Error Summary. (Cont)

<u>Areas</u>	<u>Number of Advisory Errors</u>				<u>Potential Monetary Values</u>		
	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>No Money</u>	<u>Total</u>	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>Total</u>
<u>Taxes:</u>							
a. State Code: SRB and LES disagree	-	-	1	1	\$-----	\$-----	\$-----
b. W-4 and LES disagree	-	-	11	11	\$-----	\$-----	\$-----
	-	-	12	12	\$-----	\$-----	\$-----
<u>Leave:</u>							
a. Not Re-reported	-	-	1	1	\$ 382.08	\$-----	\$ 382.08
b. Incorrectly reported	-	-	-	-	\$ 117.80	\$ 74.46	\$ 192.26
c. Career LSL not/in-							
correctly reported	8	1	-	9	\$ 3,397.10	\$ 2,798.03	\$ 6,195.13
	4	2	1	7	\$ 3,896.98	\$ 2,872.49	\$ 6,769.47
<u>Pay Entry Base Date:</u>							
a. SRB and LES disagree	-	-	7	7	\$-----	\$-----	\$-----
<u>Variable Housing</u>							
<u>Allowance:</u>							
a. Entitled/not entitled	-	-	5	5	\$-----	\$-----	\$-----
<u>Grade:</u>							
a. Incorrectly effected	1	-	3	4	\$ 26.40	\$-----	\$ 26.40
<u>ComRats/BAS:</u>							
a. DOPMA BAS entitled/ not entitled	-	-	2	2	\$-----	\$-----	\$-----
<u>VEAP:</u>							
a. Elected participation deduction	-	-	2	2	\$-----	\$-----	\$-----
<u>Family Separation</u>							
<u>Allowance:</u>							
a. Entitled/not entitled	-	-	1	1	\$-----	\$-----	\$-----
<u>Time Lost</u>							
a. Not reported	-	-	-	-	\$ 234.30	\$-----	\$-----
 TOTAL ADVISORY ERRORS	 9	 1	 49	 59	 \$ 4,157.68	 \$ 2,872.49	 \$ 6,030.17

SIGNIFICANT INTERNAL CONTROL FINDINGS (ACTIVE)
MCBCL 1080/15

[illegible]

MCDOSSET-WEST FISCAL YEAR 1986 EXAMINATION RESULTS



COMMAND:

ERROR %: 15.60%

FINDINGS AND RECOMMENDATIONS - DISBURSING EXAMINATION

I. SCOPE: The disbursing examination was also conducted in two parts, a personal financial record examination and an internal control examination.

A. Personal Financial Record Phase. This portion of the examination was conducted, in part, within the administrative office. Disbursing errors detected during the SRB Phase of the examination were verified and charged as disbursing errors when appropriate.

B. Internal Control Phase. This portion of the examination consisted of reviewing PFR's; controls logs; correspondence files; internal control systems; general security of funds; payment of public vouchers, and compliance with the Marine Corps pay policy.

C. Errors Defined

1. Monetary Errors. Monetary errors are those that have resulted in an actual overpayment or underpayment to a Marine. When corrective action is taken the Marine will likely see a change in pay. These errors comprise your command's "official" error rate.

2. Advisory Errors. Advisory errors are errors which could cause potential mispayments, reporting errors not yet affecting pay, and policy and procedural violations. Potential values, where appropriate, are shown to emphasize the significance of these errors.

II. FINDINGS AND RECOMMENDATIONS: There were no significant disbursing findings.

SUMMARY OF PFR PHASE

I. EXAMINATION SUMMARY

Service records available for examination	16,179
Number of records examined	1,320
Percent of command coverage	8%
Number of second notices issued	-0-

II. Monetary Error Summary. Monetary errors are those that have resulted in an actual overpayment or underpayment to a Marine. When corrective action is taken the Marine will likely see a change in pay. These errors comprise your command's "official" error rate.

Total number of monetary errors	46
Number of records which contained errors	40
Percentage of records with errors	3.03%

Areas	Number of Monetary errors			Actual Monetary Values		
	Over- Payments	Under- Payments	Total	Over- Payments	Under- Payments	Total
<u>Disbursing Office Input:</u>						
a. BAS/ComRats/DOPMA BAS	2	2	4	\$ 24.22	\$ 5.13	\$ 29.35
b. Family Separation Allowance	1	-	1	\$ 58.00	\$ -----	\$ 58.00
c. Variable Housing Allowance	4	14	18	\$ 16.65	\$ 78.70	\$ 95.35
d. COLA	7	6	13	\$ 63.02	\$ 779.27	\$ 842.29
e. PCS/TAD Leave	-	4	4	\$ -----	\$ 243.28	\$ 243.28
f. Bonus entitled/not entitled	1	3	4	\$ 1,435.69	\$ 2,825.59	\$ 4,261.28
	15	29	44	\$ 1,597.58	\$ 3,931.97	\$ 5,529.55
<u>Computer Program Deficiencies/ Limitation:</u>						
a. Base Pay	1	-	1	\$.96	\$ -----	\$.96
b. Leave accruals/non-accruals	1	-	1	\$ 17.92	\$ -----	\$ 17.92
	2	-	2	\$ 18.88	\$ -----	\$ 18.88
 TOTAL MONETARY ERRORS	 17	 29	 46	 \$ 1,616.46	 \$ 3,931.97	 \$ 5,548.43

III. Advisory Error Summary. Advisory errors are errors which could cause potential mis-payments, reporting errors not yet affecting pay, and policy and procedural violations. Potential values, where appropriate, are shown to emphasize that they may be as important, or more important, than actual monetary errors.

Total number of advisory errors	9
Number of records with advisory errors	9
Percentage of records with advisory errors	.68%

SUMMARY OF PFR PHASE (Cont)

<u>Areas</u>	<u>Number of Advisory Errors</u>				<u>Potential Monetary Values</u>		
	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>No Money</u>	<u>Total</u>	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>Total</u>
<u>Computer Program Deficiencies/Limitations:</u>							
a. Leave accruals/non accruals	4	1	-	5	\$ 590.39	\$ 13.45	\$ 603.84
<u>Disbursing Office Input:</u>							
a. Leave accruals/non-accruals	1	-	-	1	\$ 785.10	\$ -----	\$ 785.10
b. PCS/TAD Leave	3	-	-	3	\$ 4,302.49	\$ -----	\$ 4,302.49
	4	-	-	4	\$ 5,087.59	\$ -----	\$ 5,087.59
TOTAL ADVISORY ERRORS	8	1	0	9	\$ 5,677.98	\$ 13.45	\$ 5,691.43

Organization

* Comprise the "official" error rate (actual mispayments)

Organization

* Comprise the "official" error rate (actual mispayments)



APPENDIX B
UNITED STATES MARINE CORPS
DISBURSING ON-SITE EXAMINATION TEAM, WEST COAST
MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA 92055-5100

IN REPLY REFER TO

5214

02D

16 OCT 1986

From: Officer in Charge
To: Commandant of the Marine Corps, Headquarters, United States Marine Corps, (Code FDD), Washington D. C. 20380-0001

Subj: SUMMARY OF DETECTED ERRORS AND SIGNIFICANT FINDINGS FOR FISCAL YEAR 1986

Encl: (1) Summary of Active PFR Phase
(2) Most Common Errors Detected - Active Disbursing Phase
(3) Summary of Reserve PFR Phase
(4) Most Common Errors Detected - Reserve Disbursing Phase
(5) Summary of Active SRB Phase
(6) Summary of Significant Internal Control Findings - Active
(7) Most Common Errors Detected - Active Administrative Phase
(8) Summary of Reserve SRB Phase
(9) Summary of Significant Internal Control Findings - Reserve
(10) Most Common Errors Detected - Reserve Administrative Phase

1. During fiscal year 1986, we examined 10,727 active duty records and 1,016 reserve records. Two percent of the active duty records contained errors chargeable to the disbursing officer while no errors were charged to the disbursing officer of reserve pay. Enclosures (1) through (4) further detail the results of the disbursing phase of our examination.

2. Thirteen percent of the active duty records contained one or more errors chargeable to the commanding officer, while five percent contained errors in the reserve service record books. Enclosures (5) through (10) summarize the errors detected and present the error trends discovered during the administrative phase of our examination.


W. G. BYRNE, JR.

Copy to:
MCDOSSET-East
MCFC (QA, SYS)

SUMMARY OF ACTIVE PFR PHASE

I. EXAMINATION SUMMARY

Service records available for examination	80,867
Number of records examined	9,097
Percent of command coverage	11%
Number of second notices issued	3

II. Monetary Error Summary.

Total number of monetary errors	186
Number of records which contained errors	167
Percentage of records with errors	1.84%

Areas	Number of Monetary errors			Actual Monetary		Total
	Over-Payments	Under-Payments	Total	Over-Payments	Under-Payments	
<u>Disbursing Office Input:</u>						
a. Base Pay	1	/-	1	\$ 45.88	✓\$-----	\$ 45.88
b. BAQ	2	/1	3	\$ 21.91	✓.06	\$ 21.97
c. BAS/ComRats/DOPMA BAS	5	/6	11	\$ 32.18	✓20.09	\$ 52.27
d. FSA	3	/2	5	\$ 60.00	✓36.00	\$ 96.00
e. Lv bal	-	/1	1	\$-----	✓91.60	\$ 91.60
f. VHA	32	/28	60	\$ 326.47	✓801.39	\$ 1,127.86
g. COLA	11	/4	25	\$ 589.41	✓907.62	\$ 1,497.03
h. Career LSL	1	/-	1	\$ 1,119.00	✓-----	\$ 1,119.00
i. PCS/TAD Lv	2	/20	22	\$ 51.56	✓1,380.80	\$ 1,432.36
j. Bonus entitled/not entitled	4	/5	9	\$23,913.38	✓3,957.09	\$27,870.47
	61	77	138	\$26,159.79	\$ 7,194.65	\$33,354.44
<u>CompProgDef/Limitations:</u>						
a. Base Pay	.1	/6	7	\$.96	✓\$955.05	\$ 956.01
b. BAQ	.2	/1	3	\$ 9.60	✓19.32	\$ 28.92
c. BAS/ComRats/DOPMA	.17	/6	23	\$ 45.28	✓12.79	\$ 58.07
d. Lv Rats	-	/1	1	\$-----	✓5.70	\$ 5.70
e. Excess Lv	.1	/-	1	\$ 131.07	✓-----	\$ 131.07
f. Lv accruals	.1	/-	1	\$ 17.92	✓-----	\$ 17.92
g. VHA	-	/1	1	\$-----	✓1.10	\$ 1.10
h. COLA	.3	/3	6	\$ 150.58	✓1.90	\$ 152.48
i. PCS TODE	-	/1	1	\$-----	✓4.33	\$ 4.33
	25	19	44	\$ 355.41	\$ 1,000.19	\$ 1,355.60
<u>Miscellaneous Disbursing:</u>						
a.	.1	/3	4	\$ 3,912.00	✓143.52	\$ 4,055.52
TOTAL MONETARY ERRORS	87	99	186	\$30,427.20	\$ 8,338.36	\$38,765.56

SUMMARY OF ACTIVE PFR PHASE (Cont)

III. Advisory Error Summary.

Total number of advisory errors 55
 Number of records with advisory errors 53
 Percentage of records with advisory errors .58%

Areas	Number of Advisory Errors				Potential Monetary Values		
	Over- Payments	Under- Payments	No Money	Total	Over- Payments	Under- Payments	Total
<u>ComProgDef/Limitations:</u>							
a. Leave accruals/ non-accruals	25	2	1	28	\$ 1,044.01	\$ 53.67	\$ 1,097.68
<u>Disbursing Office Input:</u>							
a. DOPMA BAS	1	-	-	1	\$ 3.98	\$-----	\$ 3.98
b. Lv accruals/ non-accruals	3	2	-	5	\$ 816.22	\$ 926.39	\$ 1,742.61
c. PCS/TAD leave	<u>11</u>	<u>5</u>	<u>3</u>	<u>19</u>	<u>\$ 9,452.92</u>	<u>\$ 499.16</u>	<u>\$ 9,952.08</u>
	15	7	3	25	\$10,273.12	\$ 1,425.55	\$11,698.67
<u>Miscellaneous Disbursing:</u>							
a.	2	-	-	2	\$ 1,320.00	\$-----	\$1,320.00
TOTAL ADVISORY ERRORS	42	9	4	55	\$12,637.13	\$ 1,479.22	\$14,116.35

MOST COMMON ERRORS DETECTED - ACTIVE DISBURSING PHASE

1. Disbursing Office Input. This category contributed 74 percent of the monetary and 45 percent of the advisory errors detected. The following areas of entitlement were the most effected:

- a. Basic Allowance for Subsistence.
- b. Family Separation Allowance.
- c. Variable Housing Allowance.
- d. Cost of Living Allowance.
- e. Permanent Change of Station/Temporary Additional Duty Leave.
- f. Bonuses.

Errors in these categories were primarily caused by supervisory personnel failing to accurately review unit diaries prior to submission and the inability to recognize an existing error condition during the normal audit process. These deficiencies have resulted in mispayments to Marines.

2. Computer Program Deficiencies/Limitations. This category contributed 24 percent of the monetary and 51 percent of all advisory errors detected and involved the following areas of entitlement:

- a. Base Pay.
- b. Basic Allowance for Subsistence.
- c. Cost of Living Allowance.
- d. Leave Accruals/non-accruals.

These problems were caused by disbursing personnel not identifying deficiencies and limitations and initiating the proper corrective action. In many cases the deficiencies/limitations had been identified by the system assurance officer but individual records were not corrected, resulting in mispayments.

3. Internal Controls. There were no significant findings detected during our review of disbursing internal controls.

Encl (2)

SUMMARY OF ACTIVE SRB PHASE

I. EXAMINATION SUMMARY

Service records available for examination	87,720
Number of records examined	10,727
Percent of command coverage	12.23%
Number of second notices issued	47

II. Monetary Error Summary

Total number of monetary errors	1,892
Number of records which contained errors	1,380
Percentage of records with errors	12.86%

Areas	Number of Monetary errors			Actual Monetary Values		
	Over-Payments	Under-Payments	Total	Over-Payments	Under-Payments	Total
<u>ComRats/BAS:</u>						
a. ComRats not/incorrectly reported	74	49	123	\$ 5,105.29	\$ 2,025.65	\$ 7,130.94
b. ComRats retroactive approval	11	22	33	\$ 422.95	\$ 1,043.82	\$ 1,466.77
c. DOPMA BAS entitled/not entitled	150	137	287	\$ 7,442.29	\$ 8,077.77	\$15,520.06
d. BAS entitled/not entitled	1	6	7	\$ 97.22	\$ 109.84	\$ 207.06
	<u>✓ 236</u>	<u>214</u>	<u>450</u>	<u>✓ \$13,067.75</u>	<u>\$11,257.08</u>	<u>\$24,324.83</u>
<u>Family Separation Allowance:</u>						
a. Entitled/not entitled	<u>✓ 235</u>	196	431	<u>✓ \$ 8,345.07</u>	\$11,574.40	\$19,919.47
<u>Career Sea/Foreign Duty Pay:</u>						
a. Commencement/termination not/incorrectly reported	39	267	306	\$ 659.31	\$ 2,162.05	\$ 2,821.36
b. Not entitled	<u>11</u>	<u>-</u>	<u>11</u>	<u>\$ 43.24</u>	<u>\$ -</u>	<u>\$ 43.24</u>
	<u>✓ 50</u>	<u>267</u>	<u>317</u>	<u>✓ \$ 702.55</u>	<u>\$ 2,162.05</u>	<u>\$ 2,864.60</u>
<u>Variable Housing Allowance:</u>						
a. Entitled/not entitled	84	126	210	\$15,660.80	\$18,183.12	\$33,843.92
b. VHA offset not/incorrectly reported	<u>10</u>	<u>9</u>	<u>19</u>	<u>\$ 1,377.00</u>	<u>\$ 1,001.60</u>	<u>\$ 2,378.60</u>
	<u>✓ 94</u>	<u>135</u>	<u>229</u>	<u>✓ \$17,037.80</u>	<u>\$19,184.72</u>	<u>\$36,222.52</u>
<u>Basic Allowance for Quarters:</u>						
a. Partial BAQ	5	27	32	\$ 8.47	\$ 286.98	\$ 295.45
b. Entitled/not entitled/incorrectly reported	15	35	50	\$12,619.93	\$ 2,527.55	\$15,147.48
c. Quarters termination/assignment not/incorrectly reported	<u>6</u>	<u>-</u>	<u>6</u>	<u>\$ 4,412.18</u>	<u>\$ -</u>	<u>\$ 4,412.18</u>
	<u>✓ 26</u>	<u>62</u>	<u>88</u>	<u>✓ \$17,040.58</u>	<u>\$ 2,814.53</u>	<u>\$19,855.11</u>

Encl (5)

SUMMARY OF ACTIVE SRB PHASE (Cont)

II. Monetary Error Summary. (Cont)

Areas	Number of Monetary errors			Actual Monetary Values		
	Over-Payments	Under-Payments	Total	Over-Payments	Under-Payments	Total
<u>Pav Entry Base Date:</u>						
a. SRB and LES disagree	✓ 25	37	62	✓ \$ 1,251.41	\$ 3,378.60	\$ 4,630.01
<u>Station Allowance:</u>						
a. Entitled/not entitled	✓ 18	35	53	✓ \$ 792.59	\$ 3,331.59	\$ 4,124.18
<u>Grade:</u>						
a. Not/incorrectly reported	1	11	12	\$.94	\$ 1,161.42	\$ 1,162.36
b. Incorrectly effected	17	21	38	\$ 642.20	\$ 2,380.50	\$ 3,022.70
	✓ 18	32	50	✓ \$ 643.14	\$ 3,541.92	\$ 4,185.06
<u>Automated Per Diem (UDP):</u>						
a. Entitled/not entitled	✓ 25	24	49	✓ \$ 312.52	\$ 662.55	\$ 975.07
<u>Leave:</u>						
a. Not reported/re-reported	-	3	3	\$ -----	\$ 332.80	\$ 332.80
b. Incorrectly reported	3	9	12	\$ 18.13	\$ 151.76	\$ 169.89
c. PCS/TAD orders not submitted	1	30	31	\$ 111.32	\$ 3,364.08	\$ 3,475.40
	✓ 4	42	46	✓ \$ 129.45	\$ 3,848.64	\$ 3,978.09
<u>Bonus:</u>						
a. Entitled/not entitled	✓ 21	20	41	✓ \$ 28,184.80	\$ 30,090.37	\$ 58,275.17
<u>Clothing Maintenance Allowance:</u>						
a. Incorrect CMA date	3	7	10	\$ 109.60	\$ 366.23	\$ 475.83
b. RCMA not/incorrectly reported	1	21	22	\$ 55.80	\$ 1,041.74	\$ 1,097.54
	✓ 4	28	32	✓ \$ 165.40	\$ 1,407.97	\$ 1,573.37
<u>Special Duty Assignment/ Incentive Pay:</u>						
a. Entitled/not entitled	3	10	13	\$ 1,133.33	\$ 2,251.49	\$ 3,384.82
b. Imminent danger pay	-	1	1	\$ -----	\$ 10.61	\$ 10.61
	✓ 3	11	14	✓ \$ 1,133.33	\$ 2,262.10	\$ 3,395.43
<u>Courts Martial/COP:</u>						
a. Not/incorrectly reported	4	-	4	\$ 1,639.00	\$ -----	\$ 1,639.00
b. Erroneous punishments	1	7	8	\$ 1.00	\$ 180.00	\$ 181.00
	✓ 5	7	12	✓ \$ 1,640.00	\$ 180.00	\$ 1,820.00
<u>Time Lost:</u>						
a. Not/incorrectly reported	✓ 8	1	9	✓ \$ 695.66	\$ 136.92	\$ 832.58
<u>Miscellaneous Administrative Discrepancies:</u>						
a.	✓ 5	4	9	✓ \$ 764.29	\$ 586.21	\$ 1,350.50

SUMMARY OF ACTIVE SRB PHASE (Cont)

II. Monetary Error Summary. (Cont)

Areas	Number of Monetary errors			Actual Monetary Values		
	Over- Payments	Under- Payments	Total	Over- Payments	Under- Payments	Total
TOTAL MONETARY ERRORS	777	1,115	1,892	\$91,906.34	\$96,419.65	\$188,325.99

III. Advisory Error Summary

Total number of advisory errors 1,208
 Number of records with advisory errors 1,053
 Percentage of records with advisory errors 9.82%

Areas	Number of Advisory Errors				Potential Monetary Values		
	Over- Payments	Under- Payments	No Money	Total	Over- Payments	Under- Payments	Total
Career Sea/Foreign							
Duty Pay:							
a. Commencement/termination not/incorrectly reported	-	-	3	3	\$-----	\$-----	\$-----
b. Entitled	-	-	1	1	\$-----	\$-----	\$-----
c. Cumulative CarSea time/not/incorrectly reported	-	-	409	409	\$-----	\$-----	\$-----
	-	-	413	413	\$-----	\$-----	\$-----

Taxes:

a. State Code: SRB and LES disagree	-	-	36	36	\$-----	\$-----	\$-----
b. W-4 and LES disagree	-	-	216	216	\$-----	\$-----	\$-----
	-	-	252	252	\$-----	\$-----	\$-----

Leave:

a. Not reported/re-reported	7	-	2	9	\$ 2,933.92	\$-----	\$ 2,933.92
b. Incorrectly reported	5	5	3	13	\$ 1,052.85	\$ 1,311.70	\$ 2,364.55
c. Erroneous leave balance	7	2	1	10	\$ 962.14	\$ 70.58	\$ 1,032.72
d. Career LSL not/incorrectly reported	130	12	3	145	\$54,746.37	\$ 8,091.91	\$62,838.28
e. PCS/TAD orders not submitted	12	-	-	12	\$14,972.96	\$-----	\$14,972.96
	161	19	9	189	\$74,668.24	\$ 9,474.19	\$84,142.43

Pay Entry Base Date:

a. SRB and LES disagree	1	-	138	139	\$ 133.38	\$-----	\$ 133.38
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SUMMARY OF ACTIVE SRB PHASE (Cont)

III. Advisory Error Summary (Cont)

<u>Areas</u>	<u>Number of Advisory Errors</u>				<u>Potential Monetary Values</u>		
	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>No Money</u>	<u>Total</u>	<u>Over-</u> <u>Payments</u>	<u>Under-</u> <u>Payments</u>	<u>Total</u>
<u>Grade:</u>							
a. Not/incorrectly reported	-	1	5	6	\$-----	\$ 28.20	\$ 28.20
b. Incorrectly effected	<u>3</u>	<u>1</u>	<u>44</u>	<u>48</u>	<u>\$ 82.20</u>	<u>\$ 77.40</u>	<u>\$ 159.60</u>
	3	2	49	54	\$ 82.20	\$ 105.60	\$ 187.80
<u>Clothing Maintenance Allowance:</u>							
a. Incorrect CMA date	-	1	30	31	\$-----	\$ 21.60	\$ 21.60
b. RCMA not/incorrect reported	<u>1</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>\$ 2.47</u>	<u>\$ 57.60</u>	<u>\$ 60.07</u>
	1	2	32	35	\$ 2.47	\$ 79.20	\$ 81.67
<u>Variable Housing Allowance:</u>							
a. Entitled/not entitled	-	2	11	13	\$-----	\$ 30.31	\$ 30.31
b. VHA offset not/incorrectly reported	<u>-</u>	<u>-</u>	<u>19</u>	<u>19</u>	<u>\$-----</u>	<u>\$-----</u>	<u>\$-----</u>
	-	2	30	32	\$-----	\$ 30.31	\$ 30.31
<u>VEAP:</u>							
a. Elected participation no deduction	-	-	25	25	\$-----	\$-----	\$-----
b. Elected non-participation checkage in effect	<u>-</u>	<u>-</u>	<u>3</u>	<u>3</u>	<u>\$-----</u>	<u>\$-----</u>	<u>\$-----</u>
	-	-	28	28	\$-----	\$-----	\$-----
<u>Expiration of Current Contract:</u>							
a. SRB and LES disagree	-	-	27	27	\$-----	\$-----	\$-----
<u>Special Duty Assignment/ Incentive Pay:</u>							
a. OPFLY incorrect	-	-	19	19	\$-----	\$-----	\$-----
<u>ComRats/BAS:</u>							
a. ComRats incorrectly reported	-	-	1	1	\$-----	\$-----	\$-----
b. ComRats retroactive approval	4	-	2	6	\$ 50.60	\$-----	4 50.60
c. DOPMA BAS entitled	<u>4</u>	<u>-</u>	<u>4</u>	<u>4</u>	<u>\$-----</u>	<u>\$-----</u>	<u>\$-----</u>
	4	-	7	11	\$ 50.60	\$-----	\$ 50.60
<u>Time Lost:</u>							
a. Not/incorrectly reported	2	-	2	4	\$ 320.07	\$-----	\$ 320.07

SUMMARY OF ACTIVE SRB PHASE (Cont)

III. Advisory Error Summary (Cont)

<u>Areas</u>	<u>Number of Advisory Errors</u>				<u>Potential Monetary Values</u>		
	<u>Over-</u> <u>Payments</u>	<u>Under</u> <u>Payments</u>	<u>No Money</u>	<u>Total</u>	<u>Over-</u> <u>Payments</u>	<u>Under</u> <u>Payments</u>	<u>Total</u>
<u>Family Separation</u>							
<u>Allowance:</u>							
a. Not entitled	1	-	1	2	\$ 2.00	\$-----	\$ 2.00
<u>Basic Allowance for</u>							
<u>Quarters:</u>							
a. Incorrectly reported	-	-	1	1	\$-----	\$-----	\$-----
<u>NJP:</u>							
a. Erroneous punishments	-	1	-	1	\$-----	\$ 65.00	\$ 65.00
<u>Bonus:</u>							
a. Not entitled	1	-	-	1	\$ 1,121.39	\$-----	\$ 1,121.39
TOTAL ADVISORY ERRORS	174	26	1,008	1,208	\$76,380.35	\$ 9,754.30	\$86,134.65

[illegible]

MOST COMMON ERRORS DETECTED - ACTIVE ADMINISTRATION PHASE

1. Basic Allowance for Subsistence (BAS). This category contributed 24 percent of all monetary errors and involved:

a. Reporting temporary additional duty (TAD) rations for Marines who participated in an exercise on field duty orders.

b. Not or incorrectly reporting checkages of subsistence for Marines involved in field duty maneuvers or operations.

c. TAD rations not or incorrectly reported on the unit diary for enlisted personnel performing periods of TAD away from the permanent duty station.

d. Incorrect reporting of commuted rations on the unit diary.

e. Not or incorrectly reporting TAD rations for emergency leave for Marines stationed overseas, returning to CONUS.

These errors were caused by a lack of understanding of the regulations regarding subsistence, poor document flow of TAD orders, and inaccurate reviewing of the unit diary by supervisory personnel. These findings resulted in both overpayments and underpayments to individual Marines. (Ref: PRIM, par 8008 and Table 8-3; MCO 10110.33B; and DODPM, Part 3, Chap 1)

2. Family Separation Allowance (FSA). This category contributed 23 percent of all monetary errors detected and involved a variety of situations of entitlement and non-entitlement to FSA. The reasons for these errors were due primarily to inadequate research during the auditing process of the LES and a failure of supervisory personnel to detect the incorrect information during the review of the unit diary. These problems further stem from the relative inexperience administrators have in administering some pay and allowances. This is true especially for those entitlements that have been recently given to the commanding officer for reporting, that were traditionally reported by the disbursing officer. The inability to recognize periods of entitlement or nonentitlement to FSA has resulted in Marines being incorrectly paid. (Ref: DODPM, Part 3, Chap 3; and PRIM, par 8052)

3. Career Sea/Foreign Duty Pay. This category contributed 17 percent of the monetary errors detected and 34 percent of the advisory errors detected and involved:

a. Commencement of career sea pay or foreign duty pay not reported, or incorrectly reported on the unit diary.

b. Termination of career sea pay or foreign duty pay not reported, or incorrectly reported on the unit diary.

c. Cumulative career sea time not reported, or incorrectly reported on the unit diary.

Encl (7)

MOST COMMON ERRORS DETECTED - ACTIVE ADMINISTRATION PHASE (Cont)

The cause of these errors was primarily due to unfamiliarity with the regulations contained in the Department of Defense Pay Manual (DODPM), Part 1, Chapters 6 and 7, which govern the conditions of entitlement to these types of special pay. In many cases inadequate research of the appropriate pay regulation directly caused incorrect unit diary reporting of commencement and termination dates of the special pay. In a few cases, administrative oversight was the root cause for the errors. The failure to correctly report commencement or termination dates of the special pay causes incorrect payments to Marines who participate in operations in Korea, the Republic of the Philippines, or Thailand. Additionally, the failure to report all prior periods of career sea service as shown in the PRIM, paragraph 8010.5, can result in a Marine receiving career sea pay at the wrong rate.

4. Variable Housing Allowance (VHA). This item contributed 12 percent of the monetary errors detected and involved:

a. Failure to credit VHA at the old duty station rate when the Marine acquired a new dependent enroute to the new permanent duty station. When a Marine acquires a new dependent enroute to a new duty station, entitlement to VHA at the old duty station rate (if a Marine is transferred from a CONUS station to a CONUS station) commences on the date of BAQ entitlement, and continues through the day prior to the date of reporting to the new permanent duty station. This resulted in underpayments to the Marines otherwise entitled.

b. Failure to credit VHA at the old duty station rate when the Marine dispossessed government quarters. Upon dispossession of the government quarters, VHA at the old duty station rate should have been reported, by the previous command, effective on the date of dispossession of quarters. The failure of the old command to report this entitlement can be detected through the join audit by locating the quarters dispossession document and ensuring that the previous command annotated the UD number and effective date of the stop quarters (indicating action was taken by prior command) and monitoring the next LES to make sure that all entitlements have posted. This resulted in underpayments to the Marines otherwise entitled.

c. Failure to commence entitlement on the correct date when a Marine becomes entitled to BAQ or joins the new permanent duty station. The failure to report the correct BAQ effective date resulted in reporting of the wrong VHA effective date. The failure to report the correct join date resulted in the automatic change to VHA entitlement on the wrong effective date. This resulted in underpayments and overpayments to the Marines involved.

d. Failure to stop VHA for Marines living in the barracks who are receiving basic allowance for quarters at the with dependents rate solely because of child support.

e. Failure to report or correctly report data associated with VHA offset information. Incorrect or missing information results in inaccurate computations and improper payments.

Encl (7)

MOST COMMON ERRORS DETECTED - ACTIVE ADMINISTRATIVE PHASE (Cont)

The cause of these errors can be attributed to administrative personnel not being aware of the correct action to be taken in these specific cases. (Ref: PRIM, par 8116 and Table 8-37; and JTR, Chap 4, Part L)

5. Taxes. This category contributed 21 percent of the advisory errors noted during the SRB phase of the examination. In some cases the state code on the current LES did not agree with the legal residence shown on the DD Form 2058, and in others the federal tax plan did not agree with the tax plans shown on the IRS Form W-4. These errors were caused by poor document flow from the SRB section to the unit diary section. The effects of these errors are that Marines are paid incorrectly since their chosen tax plans were not implemented, and that wages are reported to the wrong state. (Ref: PRIM, par 8047)

6. Leave. This category contributed 16 percent of the advisory errors and two percent of the monetary errors noted and involved:

- a. Periods of leave not reported or re-reported on the unit diary.
- b. Periods of leave incorrectly reported on the unit diary.
- c. Erroneous leave balances.
- d. Incorrect lump sum leave records.
- e. Permanent Change of Station (PCS) and Temporary Additional Duty (TAD) periods involving delay not submitted to the disbursing officer for liquidation.

These errors were caused by a lack of knowledge by the SRB clerks, as well as oversight in some cases. The same is true for PCS orders not submitted, except in some cases inadequate internal control systems were the root cause for the failure to submit PCS claims in a timely manner. An inaccurate leave account can result in potential overpayments or underpayments when a Marine is afforded the opportunity to settle unpaid lump sum leave. Although these errors have not yet caused actual mispayments, their combined potential value is \$84,142.43. (Ref: RLLAA; PRIM, par 8069; JFPM, par 90106; and MCTIM, par 40301)

7. Pay Entry Base Date (PEBD). This item contributed 12 percent of all advisory errors and three percent of all monetary errors noted and involved the miscomputation of the PEBD based on the documentation in the SRB. These errors were caused by a lack of knowledge and the inability to recompute PEBD's by administrative personnel. Wrong PEBD's result in incorrect payments based on the number of years service for which the Marine is being paid. (Ref: DODPM, Part 1, Chap 1; and PRIM, par 8085)

8. Dependency Certification. Our examinations revealed that 37 percent of the maintenance errors detected were discovered in this category. Dependency certifications on the anniversary visual audit sheet were not completed in some cases and in others were improperly completed. These errors were caused by units not establishing effective controls to ensure comple-

MOST COMMON ERRORS DETECTED - ACTIVE ADMINISTRATIVE PHASE (Cont)

tion of the certification. The dependency certification supports the continual existence of dependents and provides assurance that changes in dependency will not go undetected. (Ref: PRIM, par 11007)

9. Unit Diary Reporting Timeliness. A review of nine pay-related unit diary entries, conducted within each unit, revealed a significant percentage of entries being reported in excess of ten days after the action had occurred. This deficiency was caused by slow document flow and poor managerial techniques within the administrative office. This results in late checkages and credits to the master military pay account. (Ref: PRIM, par 1401.2a)

10. Promotion Procedures. During a review of the unit diaries it was discovered that numerous promotions were reported in excess of ten days after the effective date of the promotion. This problem was caused by the following procedural deficiencies:

a. Training information necessary for computation of automated composite scores was not being submitted on the unit diary in a timely manner. This results in inaccurate or no composite scores being computed and consequently Marines not being promoted when eligible.

b. Commands were not screening records of eligible Marines in sufficient time to allow for preparation and certification of warrants and timely delivery of copies of warrants to the unit diary section for input. This delay resulted in Marines not receiving increased pay and allowances in a timely manner.

11. Travel Controls. Commanding officers are not making sure that all TAD claims are submitted to the disbursing officer within three working days after the Marine returns from TAD. This problem is caused by inadequate tracking procedures, operational commitments, and a lack of knowledge by supervisory personnel regarding travel regulations. As a result, travel advances cannot be liquidated by the disbursing officer and accountability of funds by the Funding Authority/Order Issuing Activity cannot be reconciled. (Ref: MCTIM, par 40301.2e)

12. Order Issuing. During our review of TAD orders we found the following deficiencies:

a. Orders did not in all cases direct a mode of transportation.

b. Orders directing the use of commercial transportation did not in all cases indicate that such transportation should be provided by government transportation request (GTR).

c. Orders did not require travelers to obtain certificates as to the availability of government quarters and messing.

The failure to adequately review the ACTS Manual when preparing orders was the cause of this finding. Administrative personnel were not fully aware of the effect of orders on travel entitlements. We did not discover any waste or abuse as a result of these omissions but the command could incur

MOST COMMON ERRORS DETECTED - ACTIVE ADMINISTRATIVE PHASE (Cont)

additional expenses if the traveler did not comply with the unwritten intent of the orders. Additionally, these omissions result in disbursing officers not being able to accurately determine travel entitlements. (Ref: ACTS Manual, par 4204 and 4205)

13. DOPMA BAS (Temporary Additional Duty (TAD) Rations). DOPMA BAS was not or incorrectly reported for all enlisted personnel performing periods of TAD away from the permanent duty station. This deficiency was caused by supervisory personnel not having adequate internal control procedures to ensure copies of all TAD orders are routed to the unit diary section for input of appropriate unit diary entries. These errors result in underpayments for Marines not receiving a subsistence allowance at their permanent duty station. (Ref: PRIM, par 8008 and Table 8-3)

14. Government Transportation Requests (GTR's). GTR's were not inventoried monthly by the responsible officers nor did the issuing officers endorse member's original orders to show date of issue, points of origin, and destination, and complete routing for the trip. Failing to comply with the regulations increases the potential for loss or misuse of GTR's and consequently government funds. (Ref: UM 4400.15, par 03000.4H and MCO P4600.14A, par 309021)

15. Invoice Processing Procedures. During our review of the commands' bill paying procedures we discovered the following deficiencies:

a. Defective invoices were not being returned to the vendor in writing, specific as to the reason for return, and the nature of required corrective action.

b. Vouchers were not properly marked to identify discounts.

These deficiencies were a result of supply personnel not being familiar with regulations concerning the processing of bills. This can result in due dates being miscomputed, the loss of discounts, and the potential for interest payments. (Ref: NavComptMan, Vol 4, Chap 6)

16. Imprest Fund. Our review of the imprest fund revealed that purchase request documents retained to support the authenticity of the purchase did not contain the name and address of the vendor. The imprest fund cashiers did not know that this information was required to be on the purchase request. Without accurate data the purchase cannot be verified as proper. (Ref: MCO P4200.15F, par 6115.4)

Encl (7)



APPENDIX C
UNITED STATES MARINE CORPS
MARINE CORPS FINANCE CENTER
KANSAS CITY, MISSOURI 64197-0001

IN REPLY REFER TO

7700
QAS-5H

9 DEC 1986

From: Commanding Officer
To: Commandant of the Marine Corps (FDD)

Subj: COMPARATIVE ANALYSIS FOR EAST AND WEST COAST MARINE CORPS
DISBURSING ON-SITE EXAMINATION TEAMS (MCDOSSET'S) FOR FISCAL YEAR 1986

Ref: (a) CMC ltr FDD-rgs 7220 of 4 May 1981

Encl: (1) Statistics for Active Duty SRB Phase
(2) Statistics for Active Duty PFR Phase
(3) Statistics for Reserve SRB Phase
(4) Comparative Analysis for Fiscal Years 1983-1986

1. The enclosures summarize select MCDOSSET East and West Coast statistics, per the reference.

2. Enclosure (1) lists the number and actual dollar value for monetary errors detected thru MCDOSSET active duty administrative examination for Fiscal Year 1986. Significant findings include the following:

a. Over 69 percent of the errors resulting in overpayments were attributed to FSA (29.5%), Com Rats/BAS (25.3%) and VHA (14.6%). Bonuses accounted for over 36 percent (\$14,869) of the overpaid dollars. Other significant contributors to total overpaid dollars were BAQ (19% or \$38,811); VHA (12.8% or \$26,107) and Com Rats/BAS (12.2% or \$24,866).

b. The primary reasons for underpayment errors were FSA (19.8%), Com Rats/BAS (17.9%), and VHA (15.8%). Bonuses accounted for over 23 percent (\$38,467) of the total underpaid dollars. Other substantial categories include VHA (17.6% or \$28,796), Com Rats/BAS (13.6% or \$22,297), and FSA (11.9% or \$19,514).

c. Error categories were ranked, with respect to volume and dollar value of overpayment and underpayment error categories, for each team and tested for significance of correlation. Results indicated significant correlations between team results for all comparisons (Volume of overpayments: $r_s = .64$, $Z = 2.50$, $p < .05$, overpayment dollar value: $r_s = .85$, $t = 8.21$, $p < .01$, volume of underpayments: $r_s = .66$, $Z = 2.56$, $p < .05$, and underpayment dollar value: $r_s = .77$, $t = 6.08$, $p < .01$). Therefore, volume and dollar value of types of errors detected in the active duty administrative phase for both teams were quite similar when ranked from highest to lowest category.

Subj: COMPARATIVE ANALYSIS FOR EAST AND WEST COAST MARINE CORPS
DISBURSING ON-SITE EXAMINATION TEAMS (MCDOSSET'S) FOR FISCAL YEAR 1986

3. Enclosure (2) lists similar statistics for the active duty disbursing phase of MCDOSSET FY 86 reviews. Disbursing office input errors accounted for over 74 percent of the overpayment errors (83% of overpayment dollars) and 79 percent of the underpayment errors (62.6% of underpayment dollars). Significant contributors to overpayment errors were VHA (44.8%) and BAQ (18.3%). Primary categories of underpayment errors were PCS/TAD Leave (34.6%) and VHA (31.3%). The predominant reason for overpaid dollars was Bonuses (69.2% or \$28,637). PCS/TAD Leave errors accounted for over 47 percent (\$9,785) of the underpaid dollars.

4. Enclosure (3) summarizes errors detected during the reserve administrative phase. Errors attributed to Grade (33.7%), Drills (24.6%), and Active Duty for Training (12.3%) contributed to the majority of overpayment errors. Bonuses accounted for over 40 percent (\$7,014) of the overpaid dollars. Errors resulting from Active Duty for Training accounted for over 44 percent of the underpayment errors and over 36 percent of the underpaid dollars.

5. Enclosure (4) provides a summary of MCDOSSET error rates for administrative, disbursing, and reserve components for Fiscal Years 1983 thru 1986. Although there appears to be a decreasing trend in the percentage of records with errors among all phases over the past four fiscal years, one must be aware of various changes over this period in the way errors are determined by the Teams. For example, if all records with errors had been included in FY 86 "official" error rates rather than only actual monetary errors, the error rates would have increased in all cases (Administrative: 12.72% to 22.04%, Disbursing: 2.99% to 4.01%, Reserve: 10.36% to 26.30%).

6. Several common problem areas appear in various phases of MCDOSSET examination results. Errors attributed to VHA contribute substantially to the number of overpayments and underpayments in the active duty administrative and disbursing phases. Bonus errors account for a significant portion of the dollar value of mispayments in active duty and reserve examination phases.

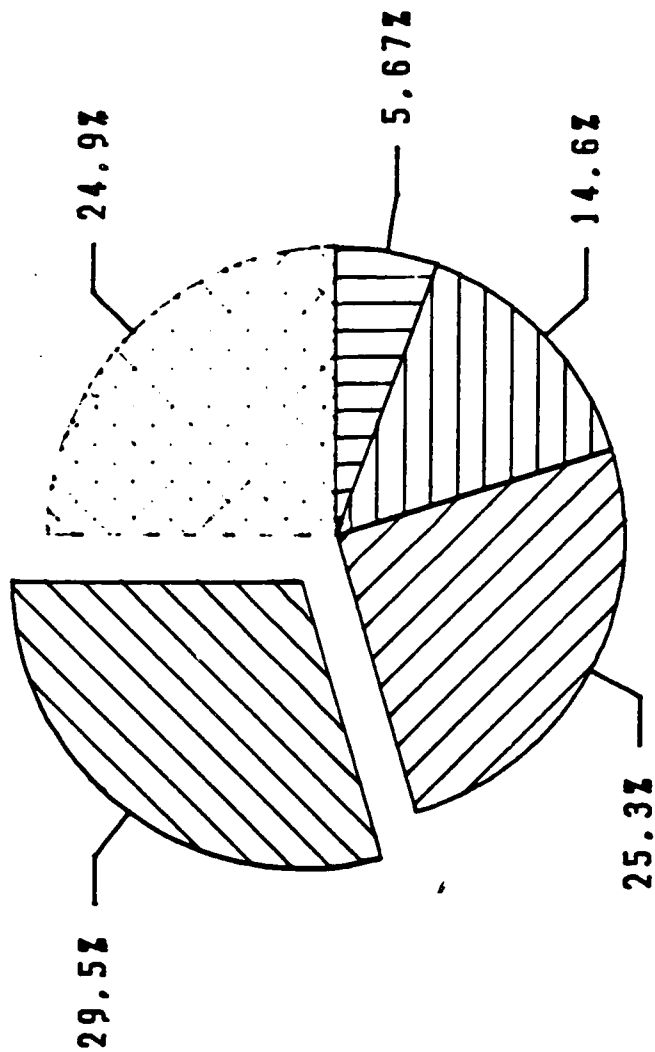
7. Refer any questions or comments pertaining to this report to Quality Assurance.


A. G. EMERY
By direction

Error Category

	East Coast-Overpayments			West Coast-Overpayments			Native Loans-Overpayments		
	No.	Rank	\$	No.	Rank	\$	No.	Rank	\$
Leave	5	13	0.775	4	14.5	0.515	9	16	0.638
Committed Rats/RRS	125	2	15.335	236	1	30.315	362	2	25.335
VA	114	3	17.485	94	3	12.105	200	3	14.565
FSN	107	1	24.685	235	2	30.245	422	1	29.535
900	53	4	8.445	26	5	3.350	81	4	5.675
Carrier Suffer Bety	14	7	2.150	50	4	6.445	64	6	4.485
PEBO	50	5	7.675	23	6.5	3.225	75	5	5.255
Station Allowance	2	16	0.315	18	9.5	2.325	20	10	1.485
Bowman	12	0.3	1.045	21	8	2.785	33	8	2.315
Grade	39	6	5.905	10	9.5	2.325	57	7	3.995
CDA	11	17	1.635	4	14.5	0.315	15	12.5	1.055
Courts Martial/CDP	12	0.3	1.045	5	12.5	0.645	17	11	1.195
Time Lost	4	14	0.615	8	11	1.035	12	14	0.605
Auto Per Bion (BPP)	3	15	0.465	25	6.5	3.225	28	9	1.565
Misc.	5	12	0.925	3	16	0.395	11	15	0.775
Spec Bety Assignment	12	0.3	1.045	3	16	0.395	15	12.5	1.055
TOTAL	632		0111,647	777		091,906	1429		920,554

REASONS FOR MC \$ ERRORS: ACTIVE SRB PHASE (FY 86) - OVERPAYMENTS

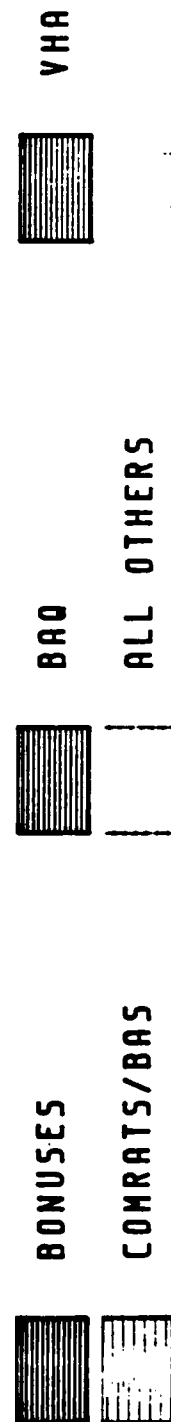
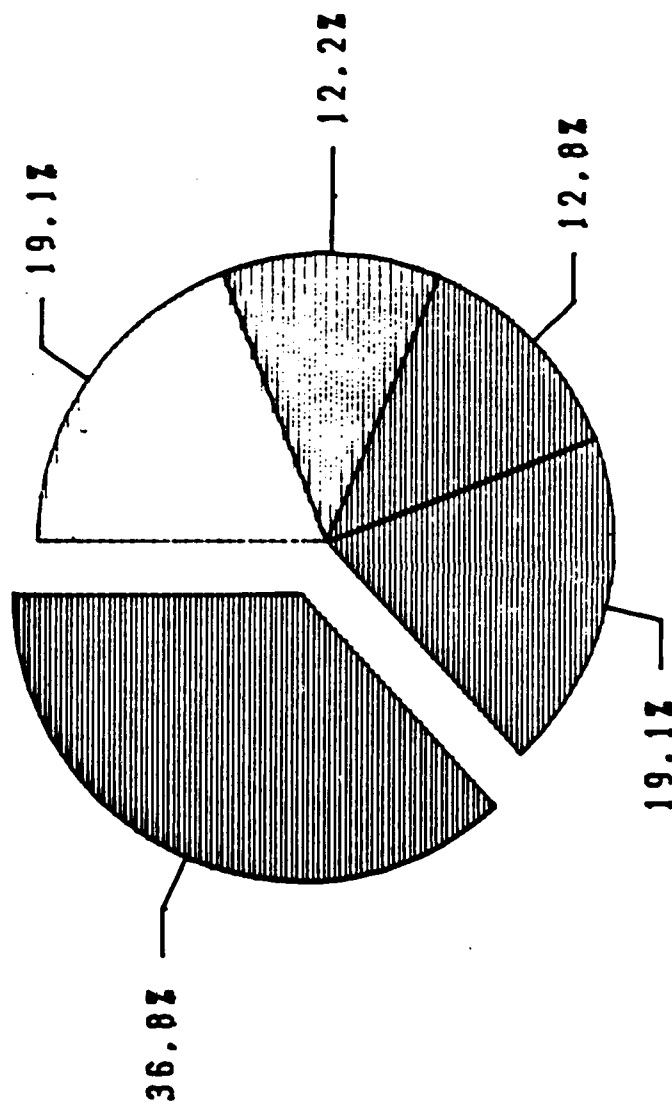


FSR
BAQ

COMRATS/BAS
ALL OTHERS

VHA

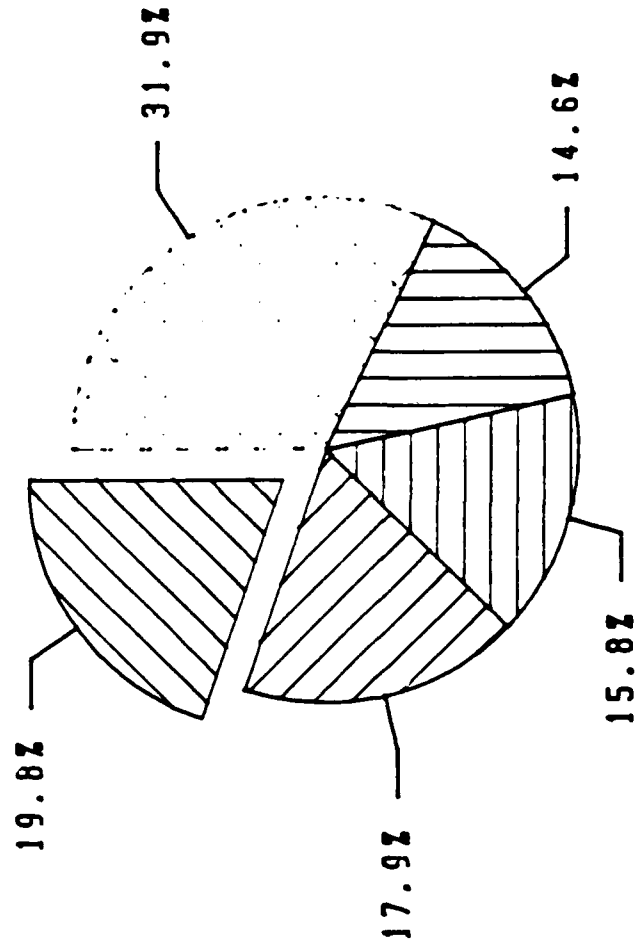
PCT TOTAL MC \$'S: ACTIVE SRB PHASE (FY 86) - OVERPAYMENTS



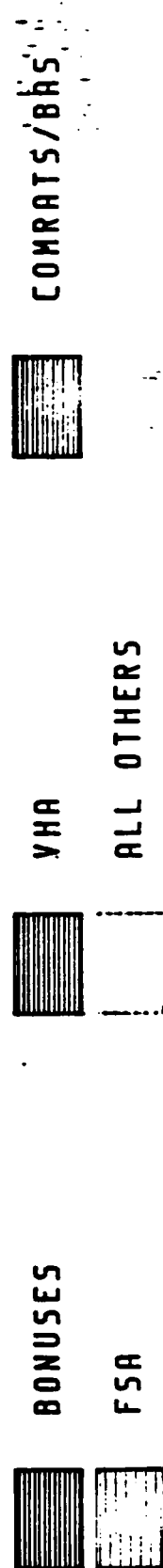
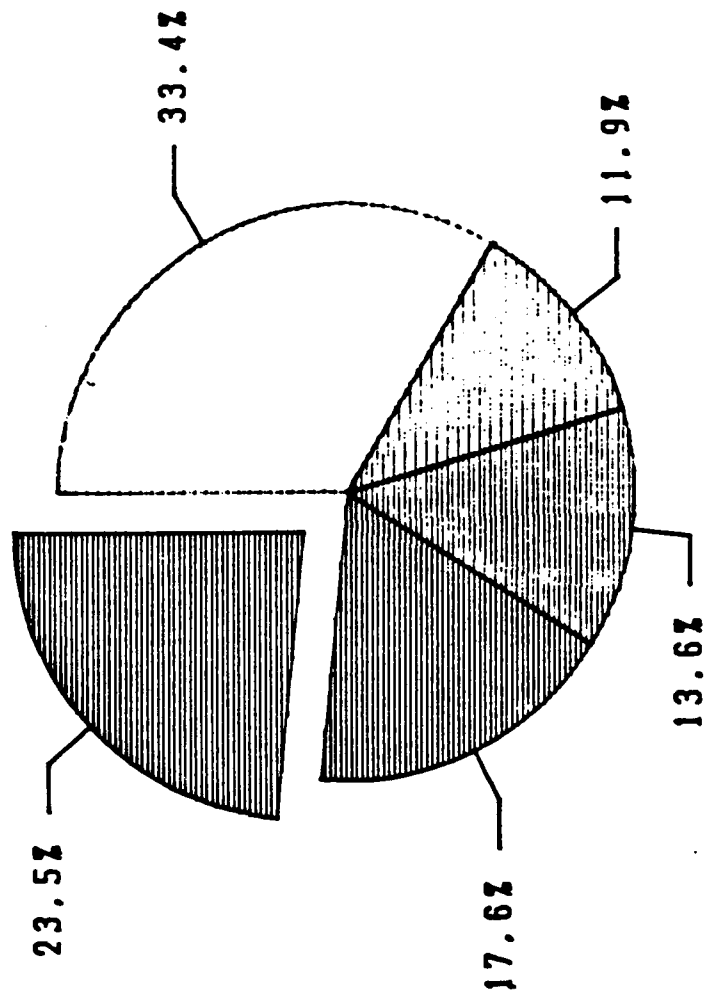
CDSST (20A) - REF. 1515 (FISCAL YEAR 1984)-Active SSB Phase

Error Category	East Coast - Underpayments			West Coast - Underpayments			Marine Corps - Underpayments		
	No.	Rank	\$	No.	Rank	\$	No.	Rank	\$
Leave	49	6	4,075	42	6	3,775	91	7	4,735
Committed Ret./PDS	16	3	16,115	214	2	15,195	344	2	17,395
WFA	16	2	28,625	135	4	12,115	343	3	15,765
FSA	185	1	22,525	156	3	17,385	341	1	19,825
BAD	184	4	12,895	62	5	5,565	164	5	8,645
Career SSB/For Del's	13	11	1,615	67	1	21,955	260	4	14,575
ESB	66	5	8,185	37	7	3,325	183	6	5,365
Station Allowance	2	14	8,255	35	8	3,145	37	10	1,935
Bonuses	6	13	8,745	29	12	1,795	26	12	1,255
Grade	15	9	1,865	32	9	2,875	47	9	2,455
CDD	28	7	2,475	28	10	2,315	56	8	2,915
Court's Partial/CDP	14	10	1,735	7	14	8,635	21	14	1,895
Time Lost	1	15.5	8,125	1	16	8,955	2	16	8,185
Auto Per Five (289)	1	15.5	8,125	24	11	2,155	23	13	1,385
Risc.	7	12	8,075	4	15	8,365	11	15	8,215
Spec Duty Assignment	18	8	2,235	11	13	8,995	29	11	1,515
TOTL	897		667,353	1115		956,428	1922		9163,783

REASONS FOR MC \$ ERRORS: ACTIVE SRB PHASE (FY 86) - UNDERPAYMENTS



PCT TOTAL MC \$'S: ACTIVE SRB PHASE (FY 86) - UNDERPAYMENTS



MCSET COMPARATIVE ANALYSIS (FY 1965) - Active FR Base

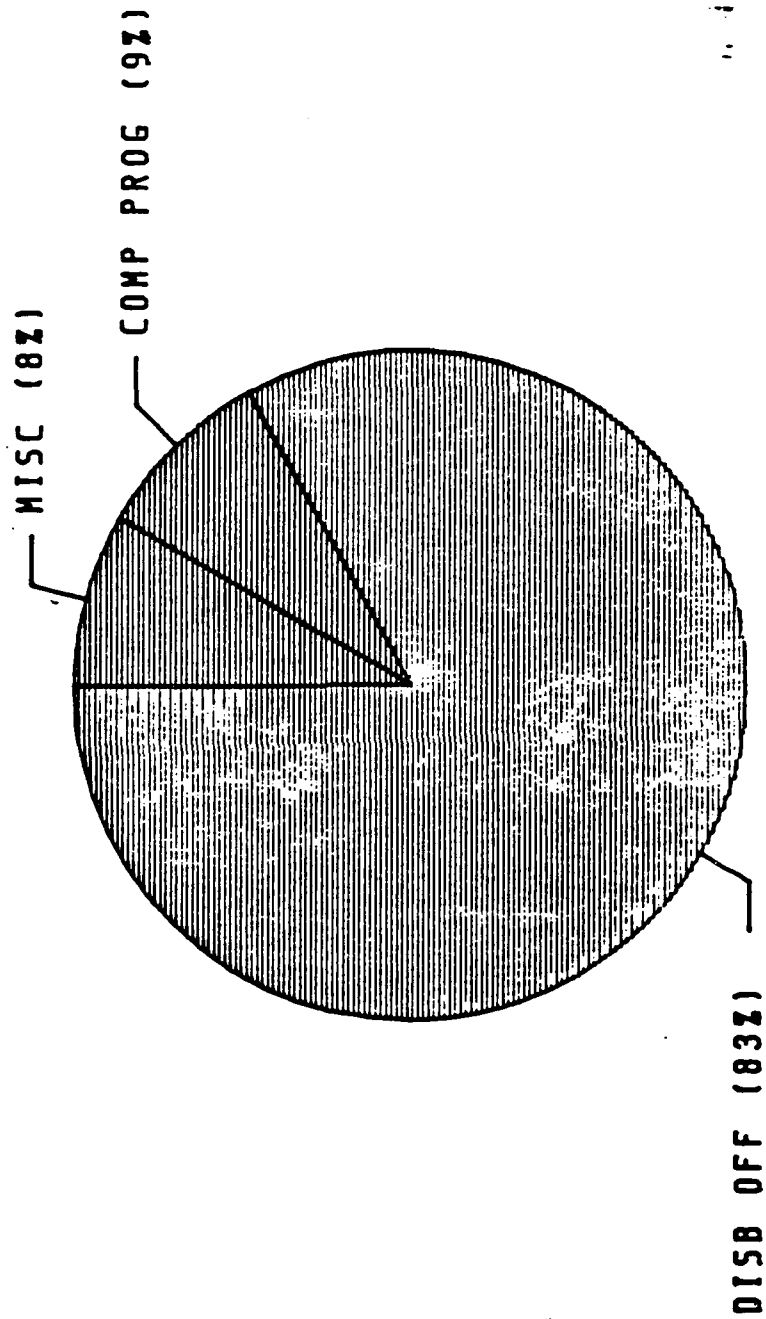
Error Category	East Coast - Overpayments			West Coast - Overpayments			Marine Corps - Overpayments		
	No.	Rank	\$	No.	Rank	\$	No.	Rank	\$
Disbursing Office Invt	4		2,335	446		0.265	2		2,285
PCS/100 Leave	17	3	10,765	6482		2,645	3		0.205
BOS/Confalts	66	1	41,775	61,822	4	11,975	32	1	52,465
WAR	7		4,435	683		0.555	3		4,925
FSN	4		2,335	632		0.215	11	2	18,035
COLA	1		0.635	6154		1.015	0		0.005
Live Accts/Nonaccts/Bal	38	2	24,855	62,215	3	14,555	2		3,285
BOD	3		1,995	64,723	1	31,835	4		5,565
Bonuses	1		0.635	6628		4,135	1		1,645
Base Pay	2		1,275	64,611	2	38,275	1		1,645
Career L.B.	15	4	9,455	6513		3,375	0		0.005
Other									
SUBTOTAL	158		76,335	615,223		78,385	61		76,115

Computer Program Deficiencies/Limitations

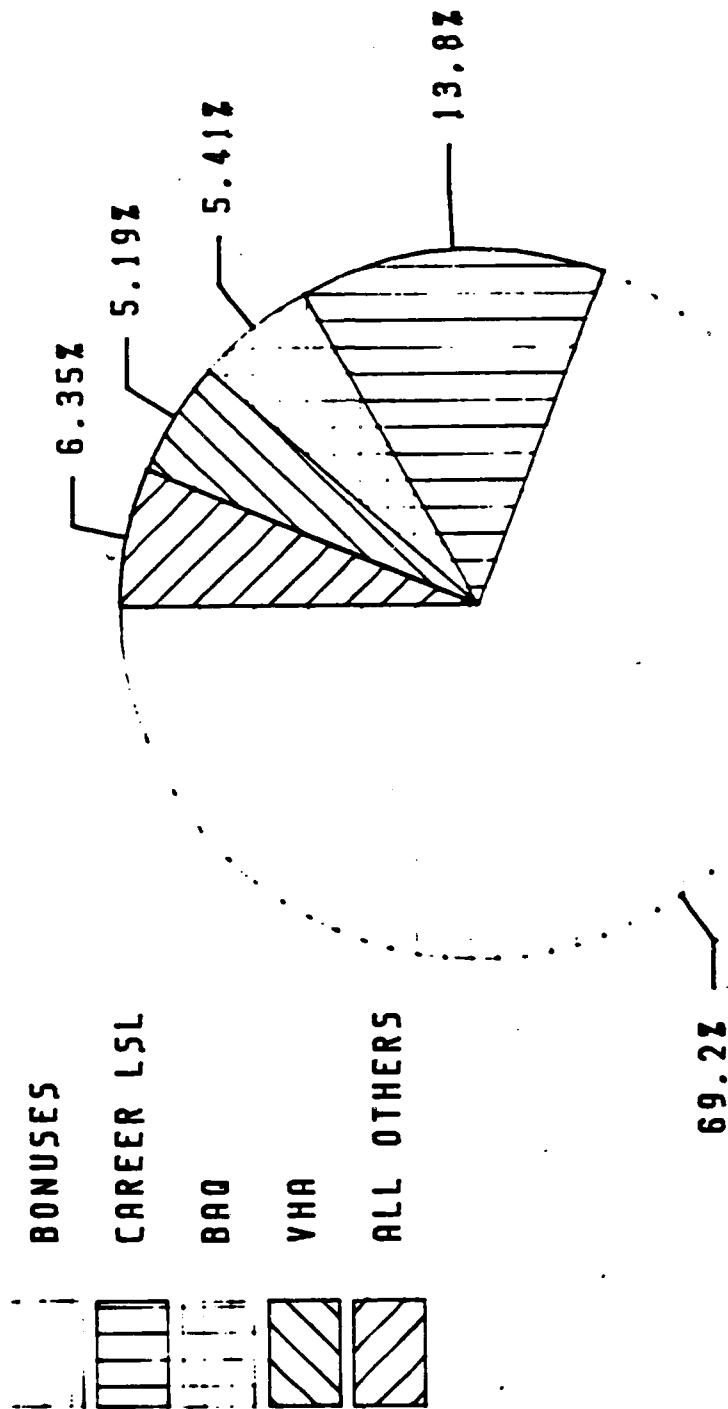
Live Accts/Nonaccts/Bal	0		0.005	60		0.005	1		4,3
BOS/Confalts/ODM	14	1	31,115	6238	2	3,655	17	1	64,005
WAR	5	4	31,115	648	4	2,245	0		0.005
Leave Balts	2		4,445	66		0.145	0		0.005
BOD	0	3	17,785	6212	3	5,465	2		3,005
COLA	1		2,625	616		0.255	3		12,005
Base Pay	3		6,675	631		0.005	1		4,3
Excess Leave	3		6,675	668		1,735	1		4,3
PCS TIDE	0		0.005	60		0.005	0		0.005
Other	9	2	20,005	61,269	1	81,595	0		0.005
SUBTOTAL	45		21,745	61,514		20,265	25		28,745
Miscellaneous	4		1,535	6264		1,365	1		1,125
TOTAL	207			619,422			87		139,427

Encl (2)

PCT TOTAL MC \$'s: ACTIVE PFR PHASE (FY 86) - OVERPAYMENTS



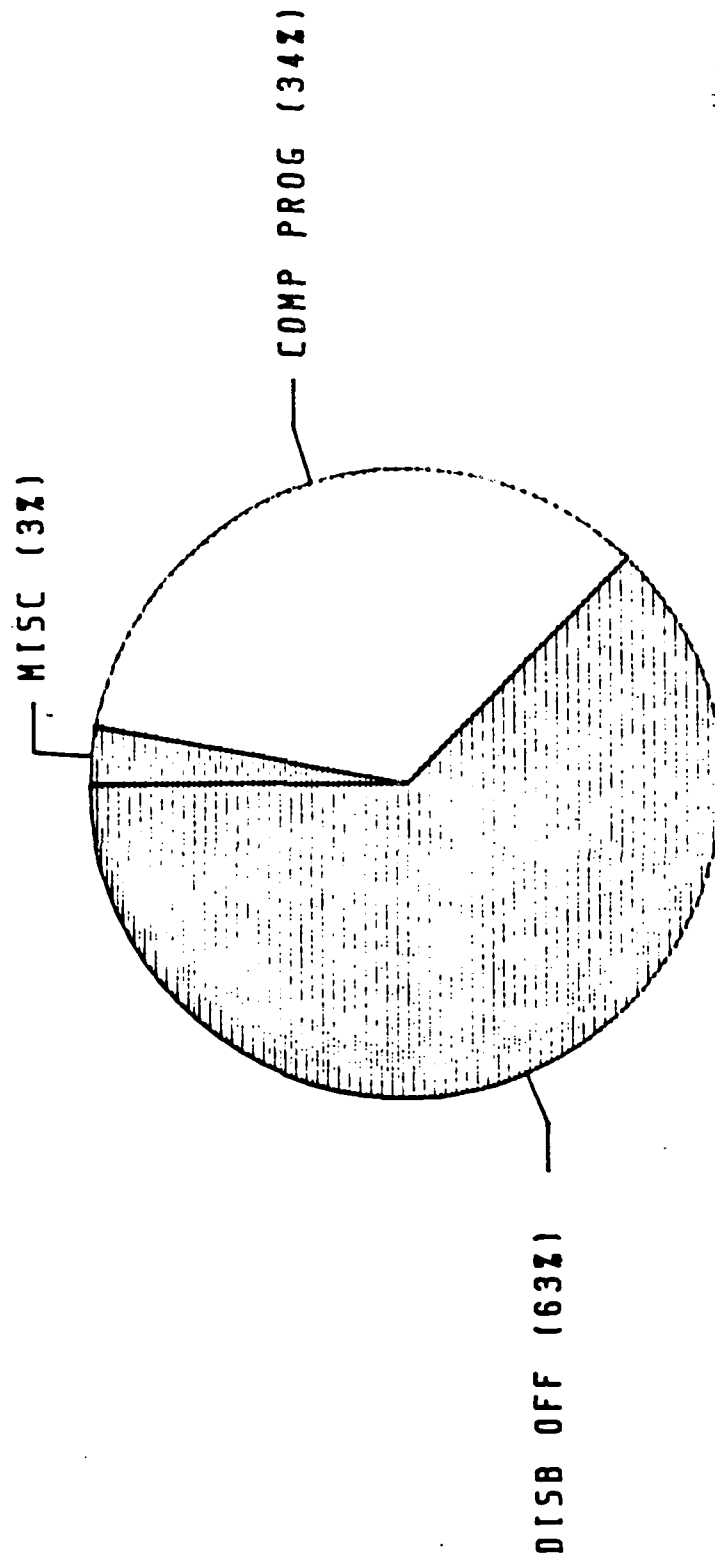
PCT TOTAL MC OVERPAYMENT DISB OFF INPUT ERROR \$'s BY TYPE



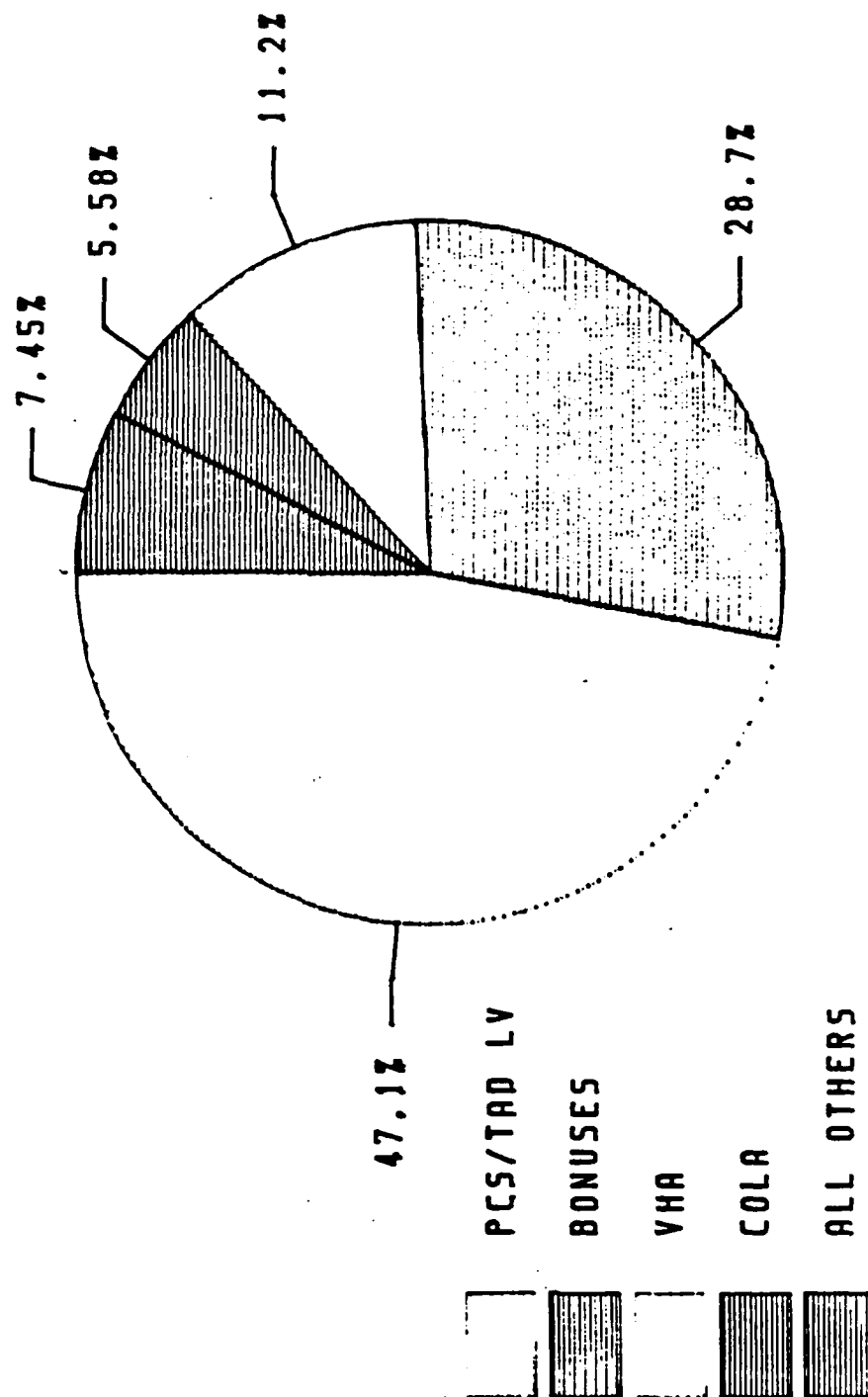
MCDCSET COMPARATIVE ANALYSIS (FY 1965) - Active RFE Phase

Error Category	East Coast - Underpayments			West Coast - Underpayments			Marine Corps - Underpayments		
	No.	Rank	\$	No.	Rank	\$	No.	Rank	\$
Buchanan Office Input									
PCS/100 Leave	75	1	37,885 64,484	28	2	25,975 61,381	35	1	34,255 69,785
MS/Comblats	25	3	12,635 6244	6	4	7,795 628	31	3	11,275 6254
WFO	50	2	29,295 61,529	20	1	35,365 6481	26	2	31,275 62,311
FSA	6	6	3,835 6125	2	2	2,685 636	8	8	2,915 6162
COLA	3	3	1,525 6233	14	3	18,185 6948	17	4	6,185 61,168
Live Accrs/Nonaccrs/Bal	1	1	6,515 6387	1	1	1,305 632	2	2	8,735 6181
BAO	10	4	2,495 6387	5	1	1,305 632	19	4	2,555 65,957
Excess	2	2	1,815 6276	0	0	0.005 64	7	7	2,555 65,957
Base Pay	2	2	1,815 6276	0	0	0.005 64	2	2	8,735 6181
Career LSL	1	1	8,515 632	0	0	0.005 64	1	1	8,735 6181
Other	7	7	3,545 6246	0	0	0.005 64	7	7	2,555 65,957
SUBTOTAL	198		78,325 613,588	77		77,785 67,135	275		79,825 628,782
Computer Program Deficiencies/Limitations									
Live Accrs/Nonaccrs/Bal	0		0.005 64	0		0.005 64	0		0.005 64
MS/Comblats/ODMPO	20	1	40,825 6336	5	1.5	31,585 613	25	1	38,245 6346
WFO	1	1	2,845 613	1	4.25	5,255 61	2	2	2,945 618
Leave Bal's	1	1	2,845 613	1	4.25	5,255 61	2	2	2,945 618
BAO	10	3	20,415 67,624	1	4.25	5,255 619	11	3	16,185 67,643
COLA	0	0	0.005 64	3	3	15,795 62	3	3	4,415 62
Base Pay	3	4	6,125 6114	5	1.5	31,585 633	9	4	13,245 61,863
Excess Leave	0	0	0.005 64	6	6	0.005 64	0	0	0.005 64
PCS TOOE	0	0	0.005 64	1	4.25	5,255 64	1	1	1,475 64
Other	14	2	28,575 62,317	0	0	0.005 64	14	2	28,575 62,317
SUBTOTAL	49		19,685 618,465	19		19,195 61,088	68		19,545 611,443
Miscellaneous	2		0.005 6258	3		3,835 6144	3		1,445 6994
TOTAL	249		624,843	99		98,338	348		633,181

PCT TOTAL MC \$'s: ACTIVE PFR PHASE (FY 86) - UNDERPAYMENTS



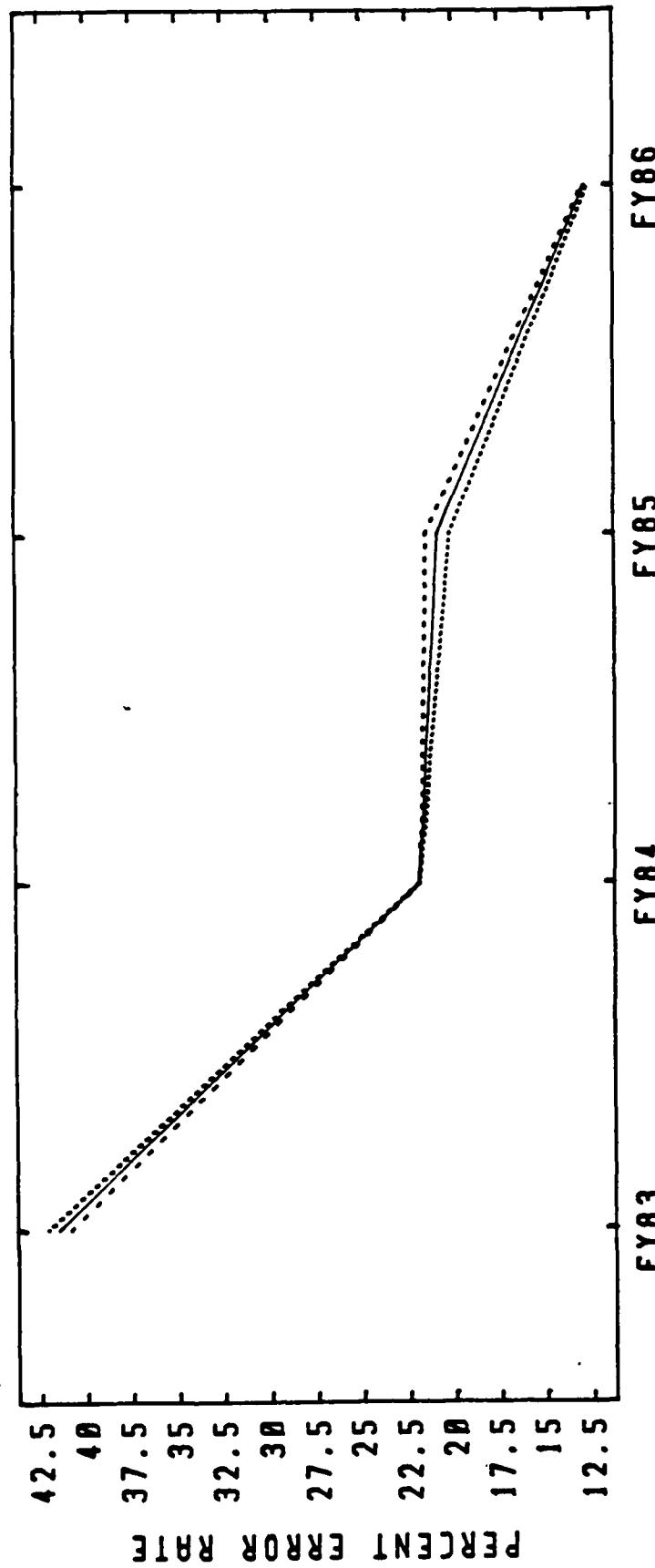
PCT TOTAL MC UNDERPAYMENT DISB OFF INPUT ERROR \$'s BY TYPE



ADJSET COMPARATIVE ANALYSIS (FISCAL YEARS 1983 THRU 1986)

CRITERIA	EAST COAST			WEST COAST			MARINE CORPS		
	FY83	FY84	FY85	FY86	FY83	FY84	FY85	FY86	FY86
ADMIN (ACTIVE)									
ORGANIZATIONS REV.	90	115	117		55	100	84		291
RECORDS EXMD	9983	10166	8155	9539	6633	10031	9573	10727	20666
RECORDS W/ ERRORS	4190	2221	1641	1197	3525	2300	2050	1300	2577
ERROR RATE	42.05	21.85	20.12	12.55	40.83	21.79	21.41	12.86	12.72
DISBURSING (ACTIVE)									
DSSN'S REVIEWED	6	11	12		9	12	12		24
RECORDS EXMD	4056	5354	9728	10441	7338	5845	7689	9097	19538
RECORDS W/ ERRORS	253	128	453	417	874	96	185	167	584
ERROR RATE	6.24	2.39	4.68	3.99	11.91	1.64	2.41	1.84	2.99
ADMIN (RESERVE)									
ORGANIZATIONS REV.	80	73	60		17	46	35		96
RECORDS EXMD	3184	3434	3876	2816	1002	2822	3258	1016	3832
RECORDS W/ ERRORS	2626	1514	1333	343	842	790	672	54	337
ERROR RATE	82.47	44.09	34.39	12.18	84.03	39.07	20.63	5.31	10.36

MCDOSSET COMPARATIVE ANALYSIS: ADMIN ACTIVE DUTY SRB ERROR RATE



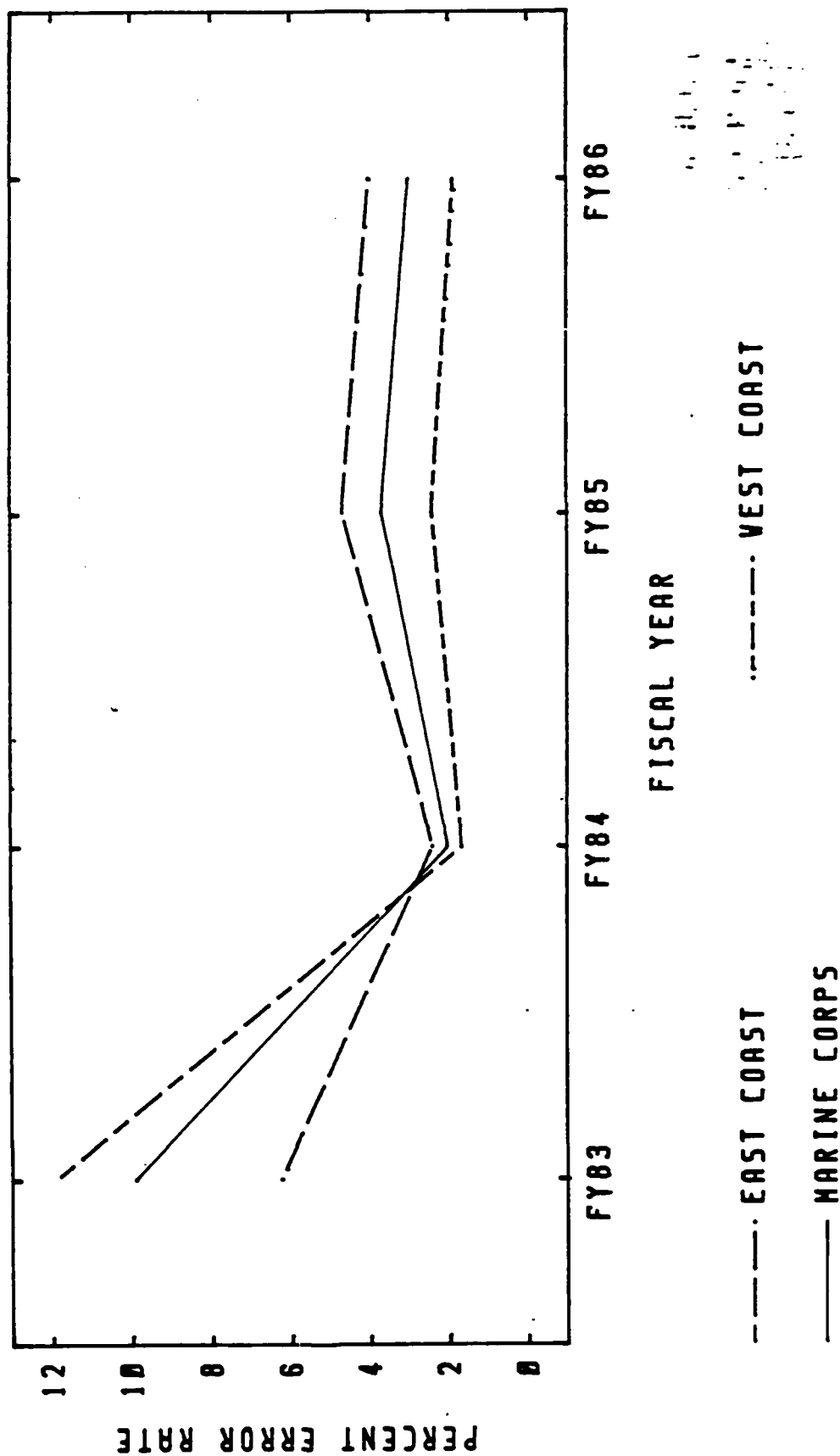
FISCAL YEAR

..... WEST COAST

----- EAST COAST

—— MARINE CORPS

HCDOSSET COMPARATIVE ANALYSIS: DISB ACTIVE DUTY PFR ERROR RATE



1. DATE 10 FEB 1961

3. SUBJECT

0 - (OTHER)

RESULTS OF MARINE CORPS DISBURSING PERFORMANCE
STANDARDS PROGRAM FOR SECOND SEMIANNUAL PERIOD
OF FISCAL YEAR 1986

Encl: (1) Overall Program Results
(2) Reports to Commanding Generals/
Commanding Officers

7220
QAS-4H
10 FEB 1987

1. Enclosure (1) provides an overall summary of disbursing performance standards results for the second semiannual period of Fiscal Year 1986.

2. Enclosure (2) is comprised of individual reports to Commanding Generals and Commanding Officers.

3. Refer questions or comments pertaining to this report to Quality Assurance.

A. G. EMERY
By direction

FISCAL DIRECTOR
DEP FISCAL DIRECTOR
EXECUTIVE OFFICER
ADMIN
SPECIAL SPT OFC (FD-1)
BUDGET BRANCH (FDB)
ACCOUNTING BRANCH (FDA)
A&R BRANCH (FDR)
DISBURSING BRANCH (FDD)
JREC

Analysis of Separated Marines' PFR's (Apr - Sep 86)

1. Four (20%) disbursing offices attained the 98 percent accuracy rate goal. This compares with 8 (40%) disbursing offices attaining the goal in the last report.
2. The Marine Corps accuracy rate decreased from 96.98 percent in the last report to 96.31 percent in the current report.
3. There were over \$126,420 in overpayments during this reporting period. Twenty-three percent (\$29,696.58) of these overpayments were due to payment errors. Another 15 percent (\$19,257.81) were due to allotment discrepancies. There were over \$113,840 in underpayments during this reporting period. Fifty percent (\$56,510.20) resulted from bonus errors.

MARINE CORPS DISBURSING PERFORMANCE STANDARDS
(2nd Semiannual FY86)

ANALYSIS OF SEPARATED MARINES PFR'S - PERCENTAGE OF PFR REJECTS
(APRIL THRU SEPTEMBER 1986)

DSSN	PERCENTAGE PFR REJECTS	SEP PFR ACCURACY RATE ACTUAL ROUNDED ¹		ACCP T ACCUR RATES ²
	3.90	96.10	96.00	
	1.38	98.62	99.00	*
	2.86	97.14	97.00	
	3.35	96.65	97.00	
	3.85	96.15	96.00	
	3.66	96.34	96.00	
	3.33	96.67	97.00	
	4.97	95.03	95.00	
	5.53	94.47	94.00	
	0.00	100.00	100.00	*
	2.91	97.09	97.00	
	2.98	97.02	97.00	
	2.93	97.07	97.00	
	5.31	94.69	95.00	
	7.12	92.88	93.00	
	3.99	96.01	96.00	
	2.65	97.35	97.00	
	1.78	98.22	98.00	*
	1.64	98.36	98.00	*
	3.44	96.56	97.00	
MC AVG	3.69	96.31		Accpt = 4 (20%)
DSSN AVG	3.38			Unaccpt = 16 (80%)
SD	1.59			
CV	.47			

Analysis of Overseas DSSN's not included in the Marine Corps Standards

50.00	50.00	50.00
7.69	92.31	92.00
5.88	94.12	94.00

¹Represents Sep. PFR Accuracy Rate (Actual) rounded to the nearest whole percentage point with criteria of .50% justifying rounding to the next highest percentage point.

²Asterisk, denotes DSSN's who attained or exceeded the established FY86 Marine Corps Accuracy Rate Goal of 98%.

SELECTED GROUP COMPARISON - SEPARATED PFR ACCURACY PERCENTAGE

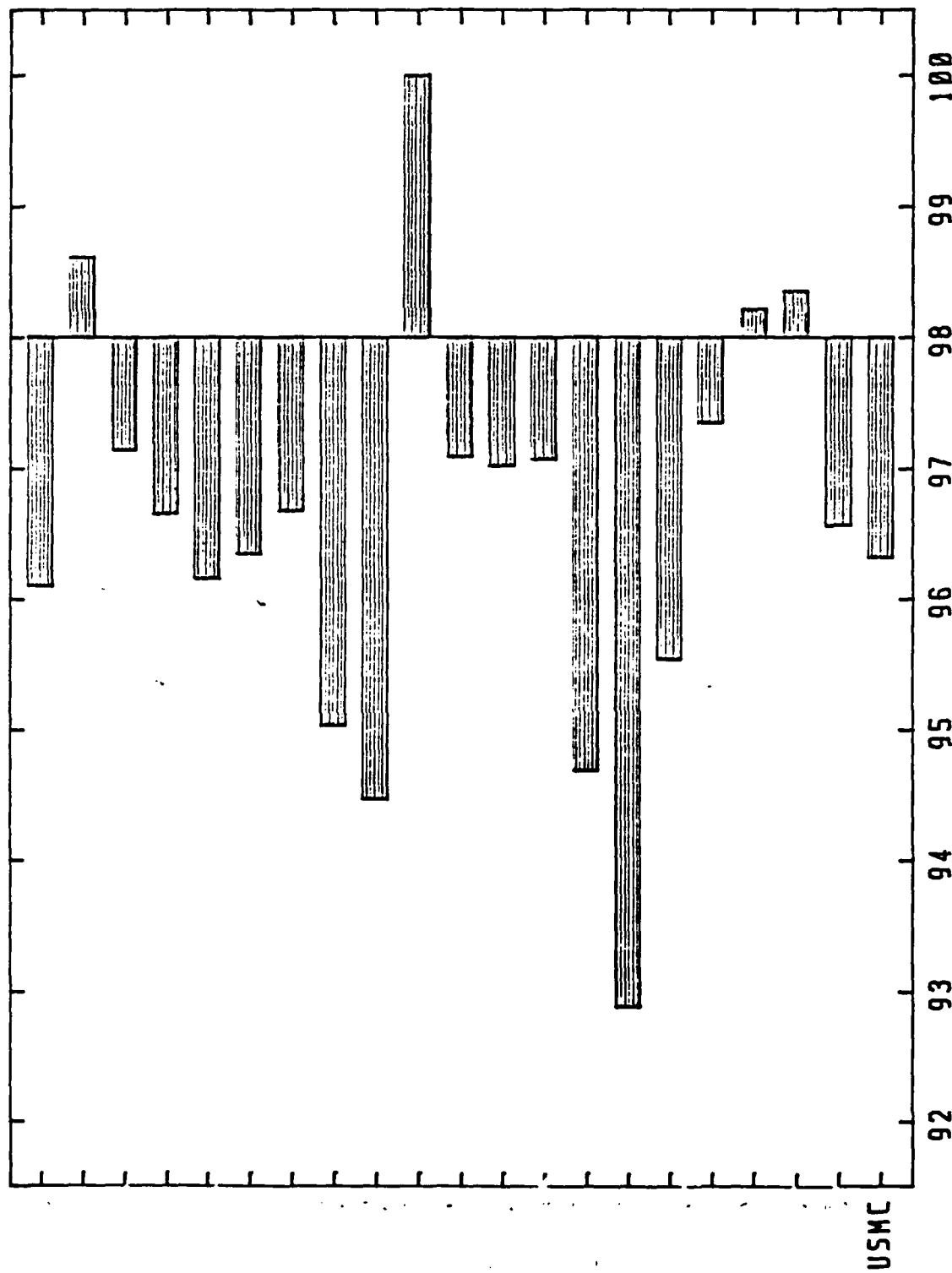
2nd FY86

(APRIL 1986 - SEPTEMBER 1986)

<u>GROUP 1 (CPCA, FSSG's - MCAGCC)</u>		<u>GROUP 5 (AIR STATIONS)</u>	
	96.67%		96.10%
	94.69%		97.09%
	<u>96.56%</u>		97.07%
			92.88%
TOTAL	95.51%		96.01%
			<u>97.35%</u>
<u>GROUP 2 (MC BASES)</u>		TOTAL	96.32%
	<u>96.65%</u>		
TOTAL	96.65%	<u>GROUP 6 (MC CAMPS)</u>	
		*	100.00%
		*	<u>98.36%</u>
<u>GROUP 3 (RECRUIT DEPOTS)</u>		*TOTAL	98.59%
*	98.62%		
*	<u>98.22%</u>		
*TOTAL	98.44%	<u>GROUP 7 (MISC)</u>	
			96.34%
<u>GROUP 4 (LOGISTICS)</u>			95.03%
	97.14%		94.47%
	<u>96.15%</u>		<u>97.02%</u>
		TOTAL	96.39%
TOTAL	96.72%		

*Denotes disbursing stations and/or selected groups that attained or exceeded Marine Corps Accuracy Goal (FY86) of 98%.

MC DISBURSING PERFORMANCE STANDARDS (2nd FY 86): SEPARATED PFRs



ACC PCT (MARINE CORPS STANDARD = 98%)

DSSNs

MMPA AUDIT ANALYSIS
(February & April 1986)

1. All disbursing offices attained the 96 percent accuracy rate goal for this reporting period. Twenty-two offices attained the 95 percent accuracy rate goal for the last reporting period (July & December 1985).
2. The Marine Corps accuracy rate increased from 98.12 (July & December 1985) to 98.28 percent (February & April 1986).
3. Nearly 85 percent of the monetary errors resulted in potential overpayments of over \$27,600. Seventy-seven percent of the overpayment errors and 98 percent of the overpayment dollars (\$27,140) were attributable to elapsed time.

RESULTS OF MARINE CORPS DISBURSING PERFORMANCE STANDARDS
(2nd SEMIANNUAL - FY86)

MMPA AUDIT ANALYSIS (FEBRUARY & APRIL 1986)

DSSN	Est. Avg. Univ. Error Rate (%)	Est. Avg. Univ Accur Rate (%)		Accept Accur. Rates (%) ₂
		Actual	Rounded ₁	
5136	.66	99.34	99.00	
5153	0.00	100.00	100.00	A
5159	.66	99.34	99.00	L
5190	.67	99.33	99.00	L
5199	.72	99.28	99.00	
5755	2.61	97.39	97.00	D
6091	1.99	98.01	98.00	S
6092	1.99	98.01	98.00	S
6096	1.33	98.67	99.00	N
6105	2.00	98.00	98.00	'
6107	.62	99.38	99.00	S
6109	.66	99.34	99.00	
6154	1.97	98.03	98.00	A
6160	2.66	97.34	97.00	C
6167	2.00	98.00	98.00	C
6168	.65	99.35	99.00	E
6187	2.67	97.33	97.00	P
6198	4.00	96.00	96.00	T
6795	1.33	98.67	99.00	A
6796	.67	99.33	99.00	B
6798	0.00	100.00	100.00	L
6805	2.00	98.00	98.00	E
6816	.67	99.33	99.00	
MC AVG	1.72	98.28	98.00	
DSSN AVG	1.41			
SD	1.01			
CV	.72			

¹Represents Est Avg Univ Accur Rate (Actual) rounded to the nearest whole percentage with criteria of .50% or greater justifying rounding to the next highest whole percentage point.

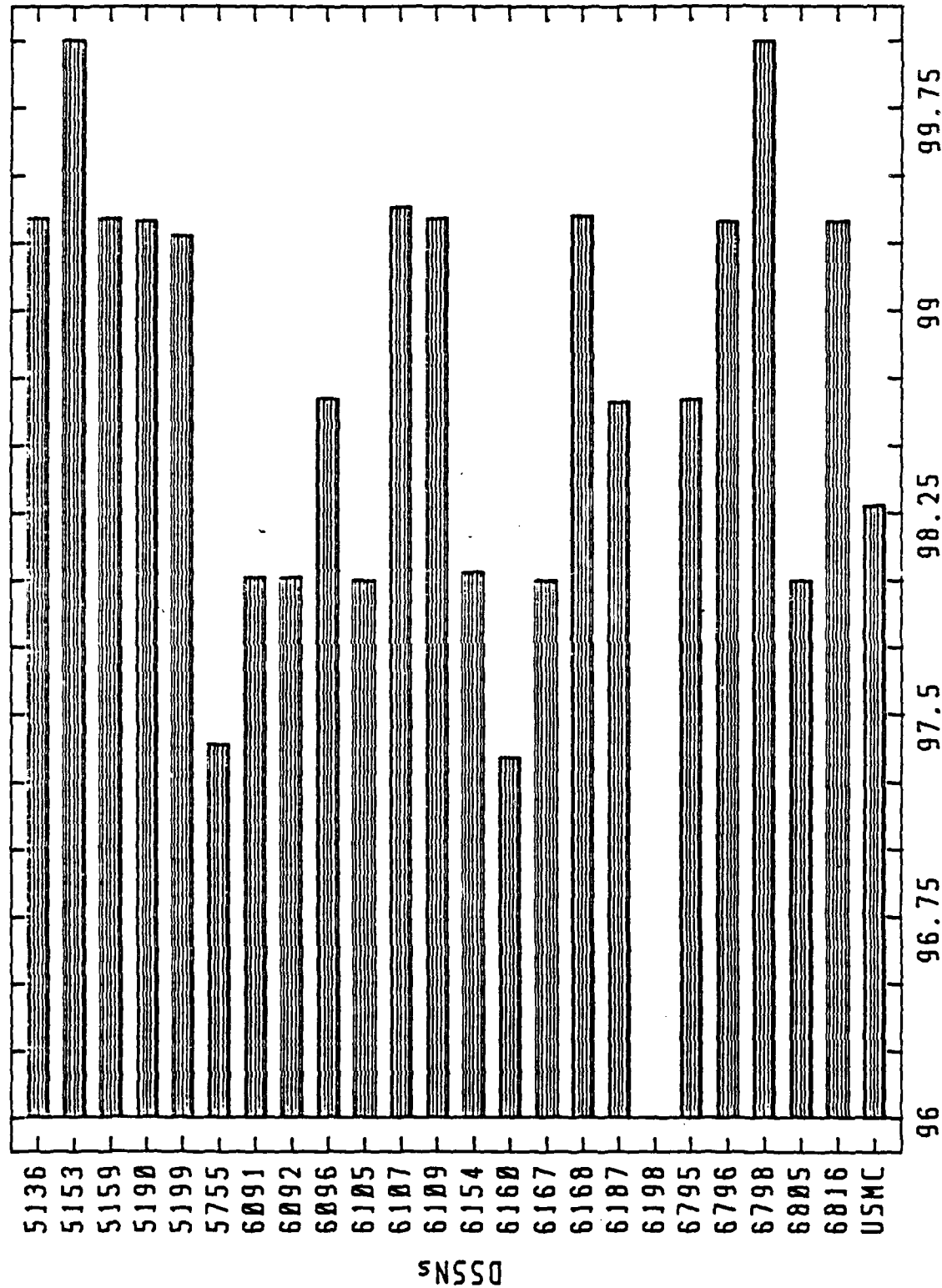
²All of the DSSN's noted attained or exceeded the Marine Corps Accuracy Rate Goal of 96%.

MMPA AUDIT ANALYSIS - (FEBRUARY & APRIL 1986)

<u>GROUP 1 (FSSG'S & MCAGCC & CPCA)</u>		<u>GROUP 5 (AIR STATIONS)</u>	
6160	97.34	5136	99.34
6092	98.01	6096	98.67
6187	97.33	6154	98.03
6816	<u>99.33</u>	6168	99.35
		6198	96.00
TOTAL	97.73	6795	98.67
		6796	<u>99.33</u>
<u>GROUP 2 (MC BASES)</u>		TOTAL	98.72
5190	99.33		
5755	<u>97.39</u>	<u>GROUP 6 (MC CAMPS)</u>	
TOTAL	98.90	6805	98.00
		6109	<u>99.34</u>
<u>GROUP 3 (RECRUIT DEPOTS)</u>		TOTAL	98.48
6798	100.00		
5153	<u>100.00</u>	<u>GROUP 7 (MISC)</u>	
TOTAL	100.00	6105	98.00
		6107	99.38
<u>GROUP 4 (LOGISTICS)</u>		6091	98.01
5159	99.34	6167	<u>98.00</u>
5199	<u>99.28</u>	TOTAL	98.10
TOTAL	99.32		

All disbursing stations and/or selected groups attained or exceeded FY86 Marine Corps Accuracy Rate Goal of 96%.

MC DISBURSING PERFORMANCE STANDARDS (2nd FY 86): MMPA AUDIT ANALYSIS



ACC PCT (MARINE CORPS STANDARD = 96%)

DSSNs

MCDOSET Disbursing Phase Examinations (FY86)

1. Nineteen (83%) disbursing offices attained the 96 percent accuracy rate goal for Fiscal Year 1986. This compares to Fiscal Year 1985, when 21 (91%) disbursing offices attained the accuracy rate goal of 94 percent.
2. The Marine Corps average accuracy rate increased from 96.33 in FY85 to 97.04 in FY86.

MARINE CORPS DISBURSING PERFORMANCE STANDARDS
(2nd Semiannual - FY86)
MCDOSSET DISBURSING PHASE EXAMINATIONS - FY86

DSSN	Sample Error Rate (%)	Accuracy Rate (%)		Accpt. Accur Rate (%)
		Actual	Rounded ¹	
5136	4.30	95.70	96.00	*
5153	4.58	95.42	95.00	
5159	4.19	95.81	96.00	*
5190	3.68	96.32	96.00	*
5199	0.00	100.00	100.00	*
5755	1.12	98.88	99.00	*
6091	2.14	97.86	98.00	*
6092	2.81	97.19	97.00	*
6096	1.14	98.86	99.00	*
6105	4.89	95.11	95.00	
6107	0.59	99.41	99.00	*
6109	0.00	100.00	100.00	*
6154	4.33	95.67	96.00	*
6160	3.03	96.97	97.00	*
6167	4.60	95.40	95.00	
6168	0.26	99.74	100.00	*
6187	1.87	98.13	98.00	*
6198	6.56	93.44	93.00	
6795	1.12	98.88	99.00	*
6796	0.73	99.27	99.00	*
6798	0.89	99.11	99.00	*
6805	1.75	98.25	98.00	*
6816	3.55	96.45	96.00	*
MC AVG	2.96%	97.04%	97.00%	
DSSN AVG	2.53%	97.47%	97.00%	Accpt: 19 (83%)
SD	1.87			Unacct: 4 (17%)
CV	.74			

¹Actual accuracy percentage rounded to the nearest whole percentage point with criteria of .50% or greater justifying rounding to the next higher percentage point.

*Denotes disbursing stations and/or selected groups that attained or exceeded Marine Corps Accuracy Goal (FY86) of 96%.

SELECTED GROUP COMPARISON (FY86)
MCDOSSET DISBURSING PHASE EXAMINATIONS

GROUP 1 (FSSG's, MCAGCC & CPCA)

*6160	96.97%
*6092	97.19%
*6187	98.13%
*6816	<u>96.45%</u>
*TOTAL	97.45%

GROUP 2 (MC BASES)

*5190	96.32%
*5755	<u>98.88%</u>
*TOTAL	97.25%

GROUP 3 (RECRUIT DEPOTS)

*6798	99.11%
5153	<u>95.42%</u>
*TOTAL	97.43%

GROUP 4 (LOGISTICS)

*5159	95.81%
*5199	<u>100.00%</u>
*TOTAL	97.24%

GROUP 5 (AIR STATIONS)

*5136	95.70%
*6096	98.86%
*6154	95.67%
*6168	99.74%
6198	93.44%
*6795	98.88%
*6796	<u>99.27%</u>

*TOTAL	97.42%
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GROUP 6 (MC CAMPS)

*6805	98.25%
*6109	<u>100.00%</u>

*TOTAL	98.81%
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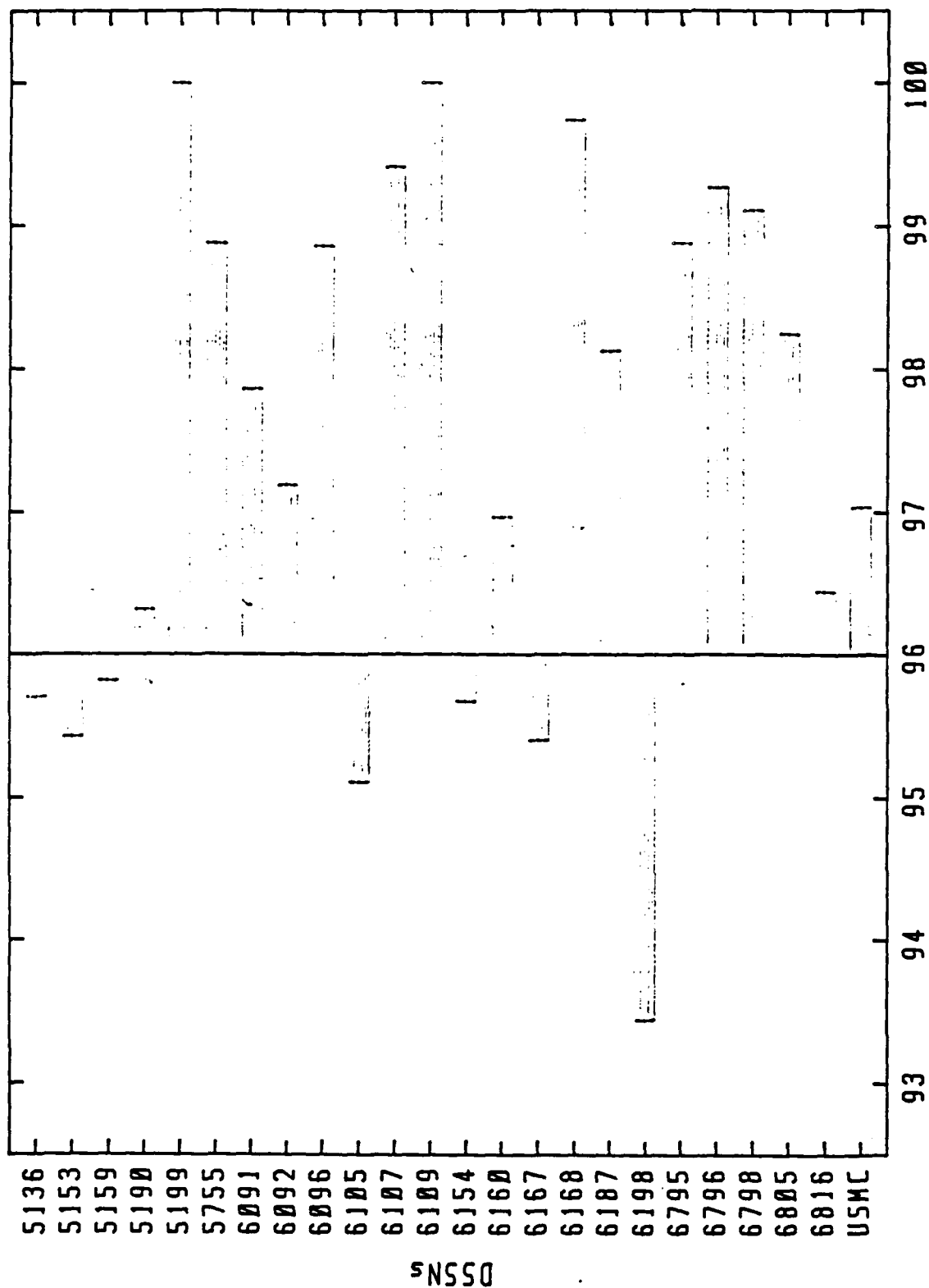
GROUP 7 (MISC)

6105	95.11%
*6107	99.41%
*6091	97.86%
6167	<u>95.40%</u>

*TOTAL	95.82%
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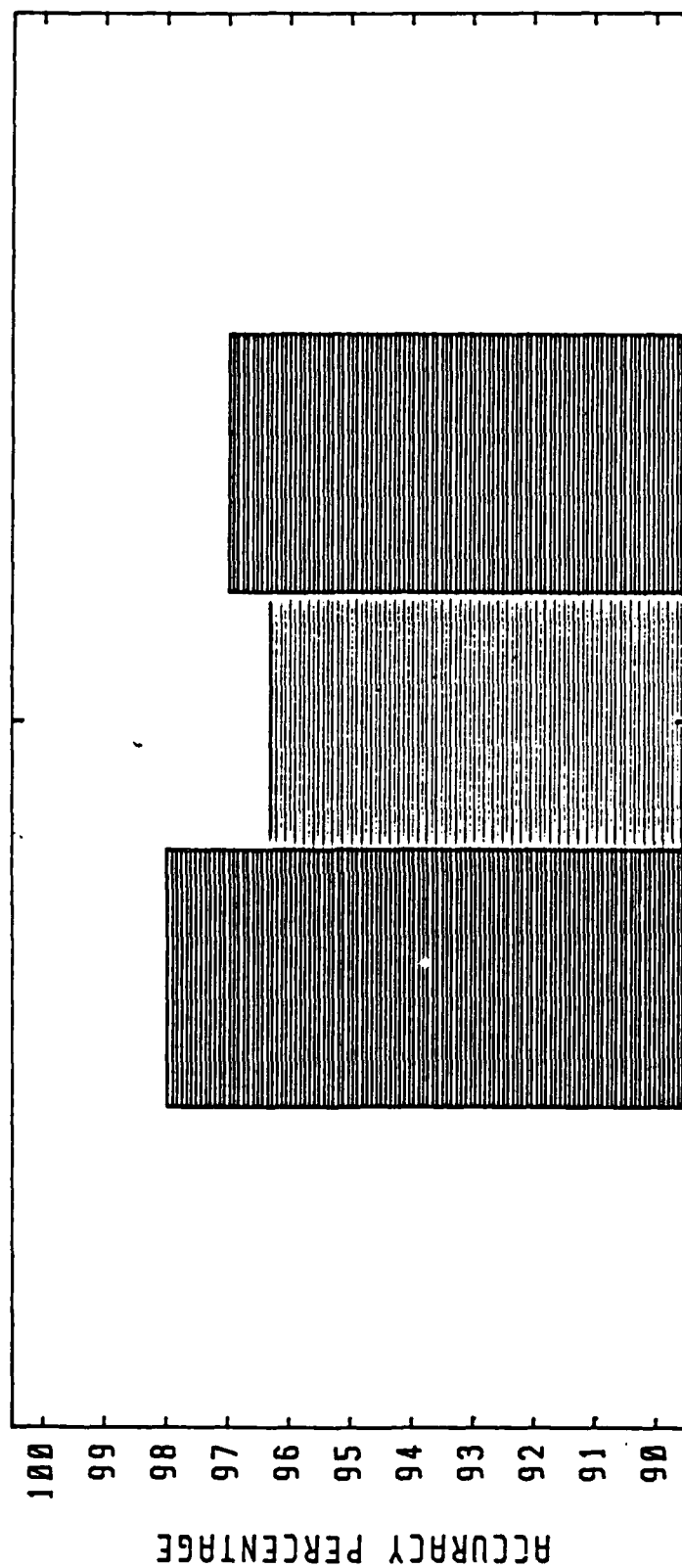
*Denotes disbursing stations and/or selected groups that attained or exceeded Marine Corps Accuracy Goal (FY86) of 96%.

MC DISBURSING PERFORMANCE STANDARDS (FY 86): MCD00SET



ACC PCT (MARINE CORPS STANDARD = 96%)

MARINE CORPS PERFORMANCE STANDARDS: SEPARATED PFRs



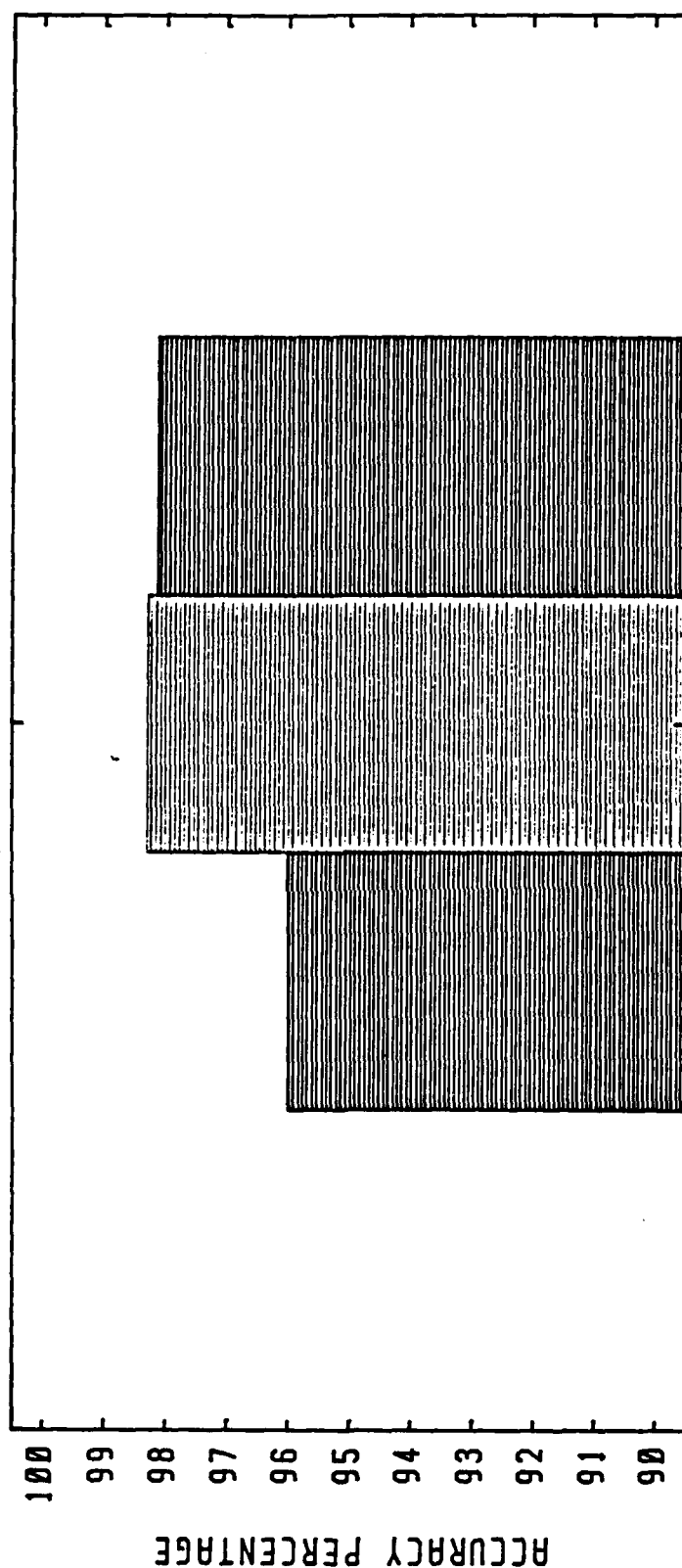
MARINE CORPS STANDARD (2nd FY 86) = 98%

MC STANDARD (2nd FY 86)

2nd FY 86 (96.31%)

1st FY 86 (96.98%)

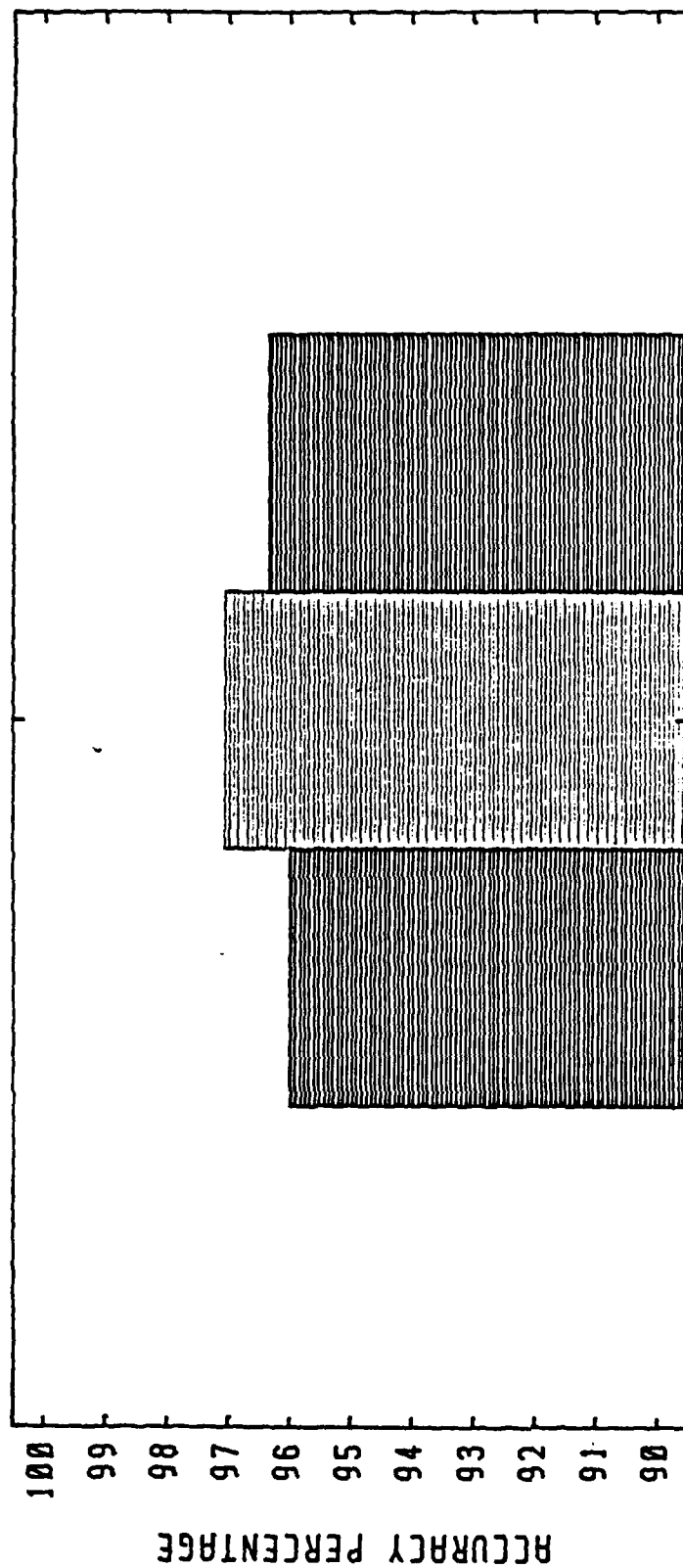
MARINE CORPS PERFORMANCE STANDARDS: MPA AUDIT ANALYSIS



MARINE CORPS STANDARD (2nd FY 86) = 96%

- MC STANDARD (2nd FY 86)
- 2nd FY 86 (98.28%)
- 1st FY 86 (98.12%)

MARINE CORPS PERFORMANCE STANDARDS: MCOOSET



MARINE CORPS STANDARD (FY 86) = 96%

HC STANDARD (2nd FY 86)

FY 86 (97.04%)


FY 85 (96.33%)

2 OPERATION CODE

P - CONCURRENCE

0 - (OTM電典)

ROUTING - Use numbers to show order of routing

 A. G. EMERY
By direction

ANALYSIS OF SEPARATED MARINES' PFR's FOR MONTH OF JUNE 1987

DSSN	PROC'D	FINAL SETTLEMENTS REQUIRED		FRAUDS		NUMBER OF PFRs REVIEWED		NUMBER OF PFRs REJECTED		ADV.	ERROR RATE		NUMBER OF PFRs IN OVERPAID STATUS	
		NO.	PCT	NO.	PCT	NO.	PCT	NO.	PCT		RATE	RATE	STATUS	STATUS
5136.	158	0	0.0%	0	0.0%	158	100.0%	0	0	0	0.00%	100.00%	16	
5153	302	0	0.0%	42	13.9%	260	86.1%	2	0	0	0.77%	99.23%	29	
5159	23	0	0.0%	0	0.0%	23	100.0%	4	0	0	17.39%	82.61%	0	
5190	477	1	0.2%	0	0.0%	476	99.8%	20	0	0	4.20%	95.80%	17	
5199	13	0	0.0%	0	0.0%	13	100.0%	1	0	0	7.69%	92.31%	1	
5755	0	0	NA	0	NA	0	NA	0	0	0	NA	NA	0	
6091	72	0	0.0%	0	0.0%	72	100.0%	2	0	0	2.78%	97.22%	4	
6092	582	0	0.0%	0	0.0%	582	100.0%	5	1	1	1.03%	98.97%	60	
6096	0	0	NA	0	NA	0	NA	0	0	0	NA	NA	0	
6105	103	0	0.0%	0	0.0%	103	100.0%	7	0	0	6.80%	93.20%	9	
6107	38	0	0.0%	0	0.0%	38	100.0%	0	0	0	0.00%	100.00%	7	
6109	12	0	0.0%	0	0.0%	12	100.0%	0	0	0	0.00%	100.00%	0	
6154	48	1	2.1%	0	0.0%	47	97.9%	1	0	0	2.13%	97.87%	6	
6150	2	0	0.0%	0	0.0%	2	100.0%	0	0	0	0.00%	100.00%	0	
6167	422	3	0.7%	0	0.0%	419	99.3%	22	0	0	5.25%	94.75%	36	
6168	65	0	0.0%	0	0.0%	65	100.0%	5	0	0	7.69%	92.31%	10	
6187	819	5	0.6%	1	0.1%	813	99.3%	21	0	0	2.58%	97.42%	76	
6198	80	0	0.0%	0	0.0%	80	100.0%	10	0	0	12.50%	87.50%	5	
6795	120	1	0.8%	0	0.0%	119	99.2%	5	0	0	4.20%	95.80%	6	
6796	282	0	0.0%	3	1.1%	279	98.9%	12	0	0	4.30%	95.70%	30	
6798	381	1	0.3%	51	13.4%	329	86.4%	14	0	0	4.26%	95.74%	4	
6805	57	0	0.0%	0	0.0%	57	100.0%	0	0	0	0.00%	100.00%	2	
6816	214	0	0.0%	0	0.0%	214	100.0%	17	0	0	7.94%	92.06%	15	
MC TOTAL	4270	12	0.3%	97	2.3%	4161	97.4%	148	1	1	3.58%	96.42%	333	

10

LOWEST ERROR RATE 0.00
HIGHEST ERROR RATE 17.39

* Separated PFRs received from your DSSN in an overpaid status and reviewed during the specified work month are included in NUMBER OF PFRs REVIEWED.

MARINE CORPS ACCURACY RATE GOAL FOR FY87 = 98%

End 11

REASONS FOR ERRORS AMONG SEPARATED MEN FOR EACH DSSN AND FOR THE MARINE CORPS (JUNE 1987); OVERPAYMENTS

DSSN 5136				DSSN 5133				DSSN 5139				DSSN 5139			
ERROR CODES	NO. OF D/P	\$ VALUE		ERROR CODES	NO. OF D/P	\$ VALUE		ERROR CODES	NO. OF D/P	\$ VALUE		ERROR CODES	NO. OF D/P	\$ VALUE	
1. a				1. a				1. a				1. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
2. a				2. a				2. a				2. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
3. a				3. a				3. a				3. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
4. a				4. a				4. a				4. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
5. a				5. a				5. a				5. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
6. a				6. a				6. a				6. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
7. a				7. a				7. a				7. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
8. a				8. a				8. a				8. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
9. a				9. a				9. a				9. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
10. a				10. a				10. a				10. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
11. a				11. a				11. a				11. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
12. a				12. a				12. a				12. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
13. a				13. a				13. a				13. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
14. a				14. a				14. a				14. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
15. a				15. a				15. a				15. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
16. a				16. a				16. a				16. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
17. a				17. a				17. a				17. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
18. a				18. a				18. a				18. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
19. a				19. a				19. a				19. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
20. a				20. a				20. a				20. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
21. a				21. a				21. a				21. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
22. a				22. a				22. a				22. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
23. a				23. a				23. a				23. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
24. a				24. a				24. a				24. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
25. a				25. a				25. a				25. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
26. a				26. a				26. a				26. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
27. a				27. a				27. a				27. a			
b				b				b				b			
c				c				c				c			
d				d				d				d			
e				e				e				e			
TOTAL	0	90.00		TOTAL	2	91,748.46		TOTAL	1	911.77		TOTAL	10	91,843.33	

Encl (2)

REASONS FOR ERRORS AMONG SEPARATED PFRs FOR EACH BSN AND FOR THE MARINE CORPS (JUNE 1987): OVERSIGHTS

BSN 6796				BSN 6805				BSN 6816				MARINE CORPS			
ERROR CODES	NO. OF O/P	\$ VALUE	ERROR CODES	NO. OF O/P	\$ VALUE	ERROR CODES	NO. OF O/P	\$ VALUE	ERROR CODES	NO. OF O/P	\$ VALUE	ERROR CODES	NO. OF O/P	\$ VALUE	ERROR CODES
1. a			1. a			1. a			1. a			1. a			1. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
2. a			2. a			2. a			2. a			2. a			2. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
3. a			3. a			3. a			3. a			3. a			3. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
4. a			4. a			4. a			4. a			4. a			4. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
5. a			5. a			5. a			5. a			5. a			5. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
6. a			6. a			6. a			6. a			6. a			6. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
7. a			7. a			7. a			7. a			7. a			7. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
8. a			8. a			8. a			8. a			8. a			8. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
9. a			9. a			9. a			9. a			9. a			9. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
10. a			10. a			10. a			10. a			10. a			10. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
11. a			11. a			11. a			11. a			11. a			11. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
12. a			12. a			12. a			12. a			12. a			12. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
13. a			13. a			13. a			13. a			13. a			13. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
14. a			14. a			14. a			14. a			14. a			14. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
15. a			15. a			15. a			15. a			15. a			15. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
16. a			16. a			16. a			16. a			16. a			16. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
17. a			17. a			17. a			17. a			17. a			17. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
18. a			18. a			18. a			18. a			18. a			18. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
19. a			19. a			19. a			19. a			19. a			19. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
20. a			20. a			20. a			20. a			20. a			20. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
21. a			21. a			21. a			21. a			21. a			21. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
22. a			22. a			22. a			22. a			22. a			22. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
23. a			23. a			23. a			23. a			23. a			23. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
24. a			24. a			24. a			24. a			24. a			24. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
25. a			25. a			25. a			25. a			25. a			25. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
26. a			26. a			26. a			26. a			26. a			26. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
27. a			27. a			27. a			27. a			27. a			27. a
b			b			b			b			b			b
c			c			c			c			c			c
d			d			d			d			d			d
TOTAL			TOTAL			TOTAL			TOTAL			TOTAL			TOTAL
1	7	\$137.80	1	0	\$0.00	1	2	\$507.00	1	4	\$1,381.18	1	7	\$1	65
		\$446.44													

REASONING FOR ERRORS AMONG SEPARATED AFFILIATES FOR THE MARINE CORPS (JUNE 1987): UNDERGMENTS

DSN 5135				DSN 5137				DSN 5139			
ERROR CODES	NL OF U/P	VALUE	ERROR CODES	NL OF U/P	VALUE	ERROR CODES	NL OF U/P	ERROR CODES	NL OF U/P	VALUE	ERROR CODES
1. a			1. a			1. a		1. a			1. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
2. a			2. a			2. a		2. a			2. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
3. a			3. a			3. a		3. a			3. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
4. a			4. a			4. a		4. a			4. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
5. a			5. a			5. a		5. a			5. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
6. a			6. a			6. a		6. a			6. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
7. a			7. a			7. a		7. a			7. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
8. a			8. a			8. a		8. a			8. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
9. a			9. a			9. a		9. a			9. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
10. a			10. a			10. a		10. a			10. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
11. a			11. a			11. a		11. a			11. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
12. a			12. a			12. a		12. a			12. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
13. a			13. a			13. a		13. a			13. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
14. a			14. a			14. a		14. a			14. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
15. a			15. a			15. a		15. a			15. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
16. a			16. a			16. a		16. a			16. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
17. a			17. a			17. a		17. a			17. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
18. a			18. a			18. a		18. a			18. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
19. a			19. a			19. a		19. a			19. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
20. a			20. a			20. a		20. a			20. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
21. a			21. a			21. a		21. a			21. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
22. a			22. a			22. a		22. a			22. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
23. a			23. a			23. a		23. a			23. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
24. a			24. a			24. a		24. a			24. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
25. a			25. a			25. a		25. a			25. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
26. a			26. a			26. a		26. a			26. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
27. a			27. a			27. a		27. a			27. a
b			b			b		b			b
c			c			c		c			c
d			d			d		d			d
e			e			e		e			e
TOTAL	0	40.00	TOTAL	0	40.00	TOTAL	3	TOTAL	10	429.46	TOTAL

(7)

4-11-68 10:10 AM

REASONS FOR ERRORS AMONG SEPARATED AFAs FOR EACH BSSN AND FOR THE MARINE CORPS (JUNE 1967): UNDERPAYMENTS

BSSN 6794				BSSN 6805				BSSN 6816				MARINE CORPS			
ERROR CODES	NL OF U/P	\$ VALUE	ERROR CODES	NL OF U/P	\$ VALUE	ERROR CODES	NL OF U/P	ERROR CODES	NL OF U/P	\$ VALUE	ERROR CODES	NL OF U/P	\$ VALUE		
1. a			1. a			1. a		1. a			1. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
2. a			2. a			2. a		2. a			2. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
3. a			3. a			3. a		3. a			3. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
4. a			4. a			4. a		4. a			4. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
5. a			5. a			5. a		5. a			5. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
6. a			6. a			6. a		6. a			6. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
7. a			7. a			7. a		7. a			7. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
8. a			8. a			8. a		8. a			8. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
9. a			9. a			9. a		9. a			9. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
10. a			10. a			10. a		10. a			10. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
11. a			11. a			11. a		11. a			11. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
12. a			12. a			12. a		12. a			12. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
13. a			13. a			13. a		13. a			13. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
14. a			14. a			14. a		14. a			14. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
15. a			15. a			15. a		15. a			15. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
16. a			16. a			16. a		16. a			16. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
17. a			17. a			17. a		17. a			17. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
18. a			18. a			18. a		18. a			18. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
19. a			19. a			19. a		19. a			19. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
20. a			20. a			20. a		20. a			20. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
21. a			21. a			21. a		21. a			21. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
22. a			22. a			22. a		22. a			22. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
23. a			23. a			23. a		23. a			23. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
24. a			24. a			24. a		24. a			24. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
25. a			25. a			25. a		25. a			25. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
26. a			26. a			26. a		26. a			26. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
27. a			27. a			27. a		27. a			27. a				
b			b			b		b			b				
c			c			c		c			c				
d			d			d		d			d				
TOTAL	7	4638.31	TOTAL	0	60.00	TOTAL	13	TOTAL	13	9955.39	TOTAL	43	819,661.40		

Reasons for Errors Among Separated Member's PFR's

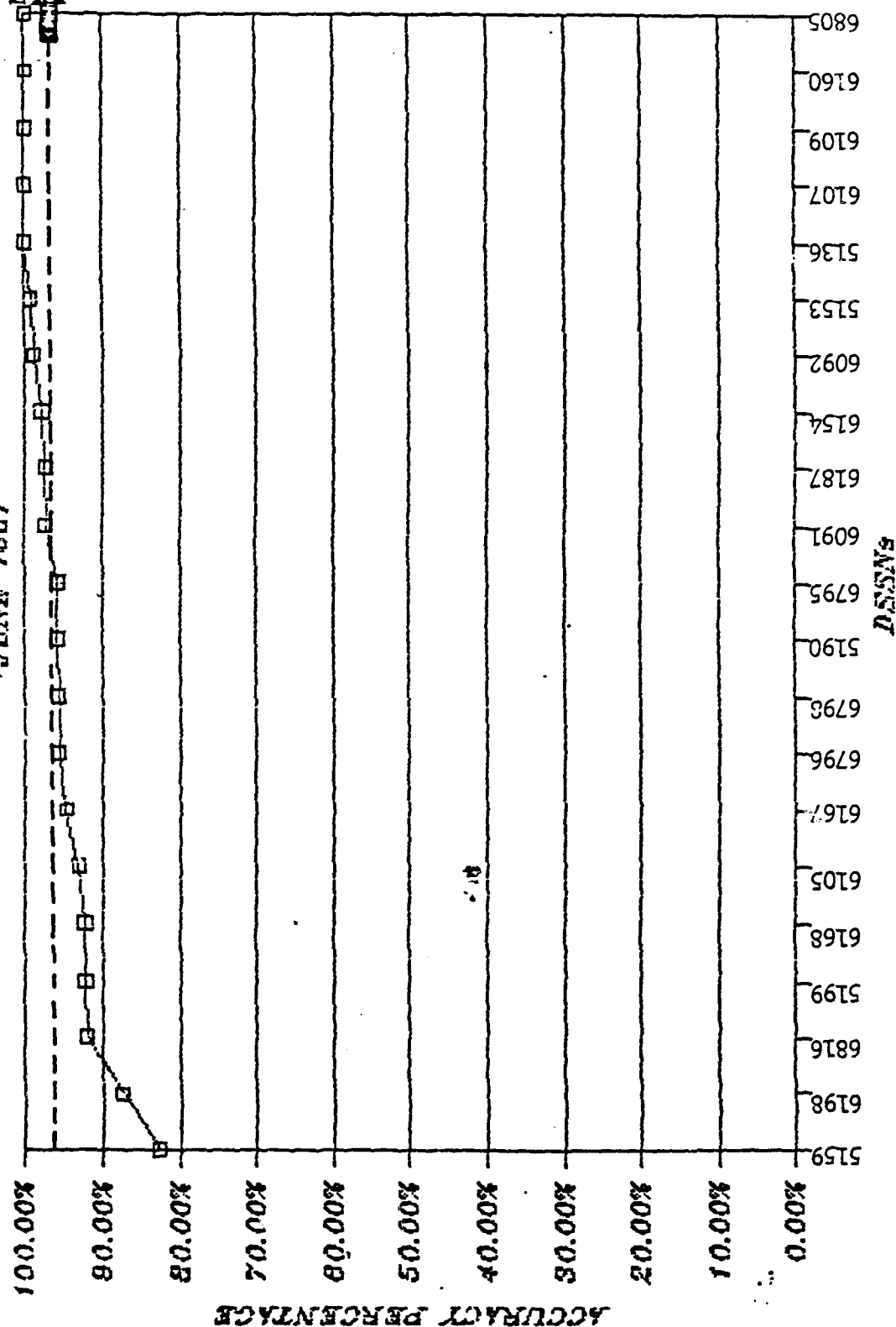
1. Payments
 - a. Hand posted to LES but not deducted
 - b. Duplicate checkage
 - c. Erroneous checkage
 - d. Unauthorized payment following fraud determination
 - e. Forecasted payment not charged, yet paid and posted to a subsequent LES
2. Allotments
 - a. Not deducted for month of release/discharge
 - b. Erroneous deduction for month of release/discharge
 - c. Prorated deduction
 - d. Failure to submit ABA or messages when required
 - e. Untimely submission of ABA or message
3. LSL
4. Taxes
5. Bonuses
6. Excess leave
7. Leave Rations
 - a. Not credited
 - b. Erroneous credit
 - c. Credited but not considered in leave balance
 - d. Duplicate credit
 - e. Credited but Com Rats not checked
8. Forfeiture
9. TODES
10. Cancelled checks
11. UA/Time lost
12. Basic Pay
 - a. Erroneous Pay Grade (Promoted/Reduced)
 - b. Erroneous Pay Rate (PEBD)
 - c. Over/credit checkage (i.e., credit of basic pay differs from actual date of release/discharge)
13. BAQ/Qtrs
14. BAS/Com Rats
15. Clothing Allowance

16. For/Sea Duty Pay
17. Diving Duty
18. Haz Duty
19. Sev. pay
20. Prof. pay
21. Adv. pay
22. VEAP
23. TVL/Trans
24. C & SS
25. Clothing ckgs.
26. Miscomputation-mathematical errors on discharge account summary sheet
27. Miscellaneous
 - a. Non deduction of balance for liquidation of indebtedness
 - b. Erroneous credit/checkage for VHA
 - c. Other (not previously defined)

SEPARATED PFR ACCUR RATES

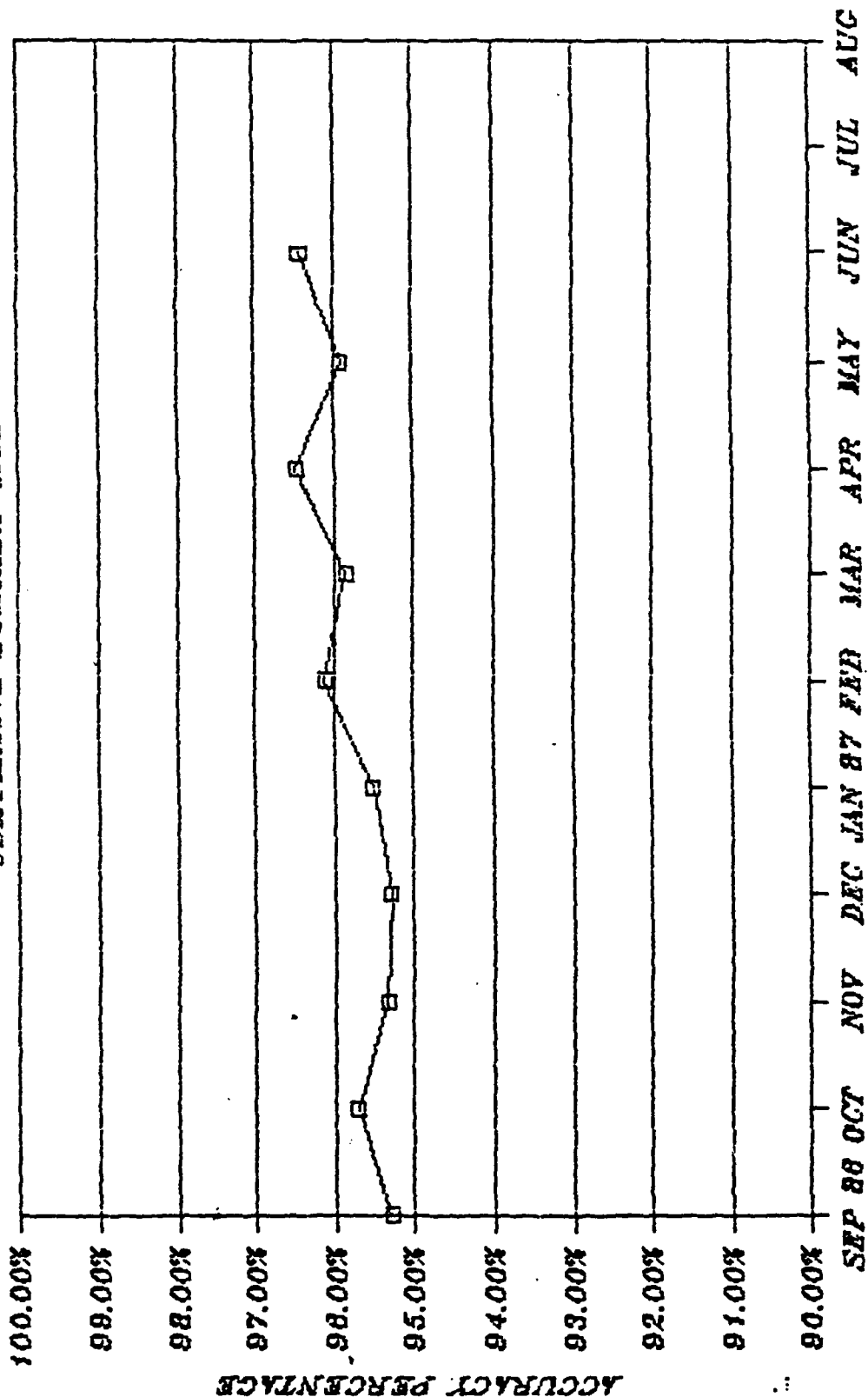
JUNE 1987

Marine Corps
Avg = 96.42



ACCUR RATE FOR MC: SEP PFRS

CUMULATIVE SUMMARY GRAPH



SEPTEMBER 1986 - AUGUST 1987

MORR ADJUT ANALYSIS REPORT (JUL-DEC-1963)									
MORR ADJUT ANALYSIS REPORT (JUL-DEC-1963)					MORR ADJUT ANALYSIS REPORT (JUL-DEC-1963)				
BSN/MONTH	UNIV SIZE	SAMPLE SIZE	ERRORS	SAMPLE ERROR RATE	EST UNIV STATISTICS	ERRORS	SAMPLE SIZE	ERRORS	EST UNIV STATISTICS
BSN/MONTH	UNIV SIZE	SAMPLE SIZE	ERRORS	ERROR RATE	TTL ERRORS	ERRORS	SAMPLE SIZE	ERRORS	TTL ERRORS
BSN/MONTH	UNIV SIZE	SAMPLE SIZE	ERRORS	ERROR RATE	ERROR PCT	BSN/MONTH	UNIV SIZE	SAMPLE SIZE	ERROR PCT
5136 AUG	16236	75	0	0.00%	0.00%	5136 AUG	3223	75	0
DEC	9896	75	0	0.00%	0.00%	DEC	3231	75	0
TOTAL	26132	150	0	0.00%	0.00%	TOTAL	6454	150	0
Avg	16211			0.00%	100.00%	Avg	3377		0.00%
5153 AUG	2637	75	0	0.00%	0.00%	5153 AUG	19459	75	0
DEC	2595	75	0	0.00%	0.00%	DEC	19087	75	0
TOTAL	5232	150	0	0.00%	0.00%	TOTAL	38546	150	0
Avg	2616			0.00%	100.00%	Avg	19673		0.00%
5159 AUG	1114	75	0	0.00%	0.00%	5159 AUG	24657	75	2
DEC	1164	75	0	0.00%	0.00%	DEC	24681	75	3
TOTAL	2278	150	0	0.00%	0.00%	TOTAL	49338	150	5
Avg	1139			0.00%	100.00%	Avg	24629		0.00%
5190 AUG	6113	75	6	0.00%	445.04%	5190 AUG	3476	75	2
DEC	7485	75	1	1.33%	98.73%	DEC	3508	75	0
TOTAL	13598	150	7	4.67%	587.77%	TOTAL	6984	150	2
Avg	6799			4.67%	95.63%	Avg	3528		1.33%
5199 AUG	634	75	0	0.00%	0.00%	5199 AUG	31076	75	1
DEC	699	75	0	0.00%	0.00%	DEC	32466	75	2
TOTAL	1333	150	0	0.00%	0.00%	TOTAL	63542	150	3
Avg	667			0.00%	100.00%	Avg	31771		0.00%
5725 AUG	16413	75	4	5.33%	90.23%	5725 AUG	4769	75	7
DEC	1908	75	1	1.33%	24.58%	DEC	4741	75	1
TOTAL	18321	150	5	3.33%	124.80%	TOTAL	9510	150	8
Avg	1916			3.33%	96.74%	Avg	4755		5.33%
6091 AUG	4535	75	1	1.33%	68.46%	6091 AUG	8238	75	1
DEC	4567	75	0	0.00%	0.00%	DEC	8612	75	1
TOTAL	9102	150	1	0.67%	68.46%	TOTAL	16850	150	2
Avg	4551			0.67%	99.34%	Avg	8425		1.33%
6095 AUG	24425	75	0	0.00%	0.00%	6095 AUG	12428	75	0
DEC	22917	75	1	1.33%	385.56%	DEC	12948	75	0
TOTAL	47342	150	1	0.67%	385.56%	TOTAL	25376	150	0
Avg	23671			0.67%	99.33%	Avg	12688		0.00%
				0.67%	99.33%				0.00%

MARITIME ANALYSIS REPORT(JUL-DEC 1965)										MARITIME ANALYSIS REPORT(JUL-DEC 1966)																
UNIV. STATISTICS					UNIV. STATISTICS					UNIV. STATISTICS					UNIV. STATISTICS											
BSN/MONTH	UNIV. SIZE	SAMPLE SIZE	NO. OF ERRORS	SAMPLE ERROR RATE	EST. UNIV. ERROR RATE	TTL. ERRORS	ERROR	ACCUR. PCT	BSN/MONTH	UNIV. SIZE	SAMPLE SIZE	NO. OF ERRORS	SAMPLE ERROR RATE	EST. UNIV. ERROR RATE	TTL. ERRORS	ERROR	ACCUR. PCT	BSN/MONTH	UNIV. SIZE	SAMPLE SIZE	NO. OF ERRORS	SAMPLE ERROR RATE	EST. UNIV. ERROR RATE	TTL. ERRORS	ERROR	ACCUR. PCT
60% A/B	3743	75	0	0.00%	0.00%	0	0.00%	100.00%	67% A/B	2817	75	0	0.00%	0.00%	0	0.00%	100.00%	60% A/B	3743	75	0	0.00%	0.00%	0	0.00%	100.00%
DEC	4101	75	3	4.00%	4.00%	64,040	64,040	99.99%	DEC	2713	75	0	0.00%	0.00%	0	0.00%	100.00%	DEC	4101	75	3	4.00%	4.00%	64,040	64,040	99.99%
TOTAL	7844	150	3	2.00%	2.00%	164,040	164,040	97.91%	TOTAL	5526	150	0	0.00%	0.00%	0	0.00%	100.00%	TOTAL	7844	150	3	2.00%	2.00%	164,040	164,040	97.91%
A/B	3822			2.00%	2.00%			97.91%	A/B	2780			0.00%	0.00%			100.00%	A/B	3822			2.00%	2.00%			97.91%
61% A/B	6169	75	3	4.00%	4.00%	248,160	248,160	99.99%	61% A/B	6065	75	0	0.00%	0.00%	0	0.00%	100.00%	61% A/B	6169	75	3	4.00%	4.00%	248,160	248,160	99.99%
DEC	6354	75	1	1.33%	1.33%	84,720	84,720	99.99%	DEC	5440	75	0	0.00%	0.00%	0	0.00%	100.00%	DEC	6354	75	1	1.33%	1.33%	84,720	84,720	99.99%
TOTAL	12523	150	4	2.67%	2.67%	331,480	331,480	97.33%	TOTAL	7274	150	0	0.00%	0.00%	0	0.00%	100.00%	TOTAL	12523	150	4	2.67%	2.67%	331,480	331,480	97.33%
A/B	6282			2.67%	2.67%			97.33%	A/B	7274			0.00%	0.00%			100.00%	A/B	6282			2.67%	2.67%			97.33%
61% A/B	2332	75	0	0.00%	0.00%	0.000	0.000	100.00%	61% A/B	6016	75	0	0.00%	0.00%	0	0.00%	100.00%	61% A/B	2332	75	0	0.00%	0.00%	0.000	0.000	100.00%
DEC	2811	75	0	0.00%	0.00%	0.000	0.000	100.00%	DEC	7787	75	0	0.00%	0.00%	0	0.00%	100.00%	DEC	2811	75	0	0.00%	0.00%	0.000	0.000	100.00%
TOTAL	4943	150	0	0.00%	0.00%	0.000	0.000	100.00%	TOTAL	15337	150	0	0.00%	0.00%	0	0.00%	100.00%	TOTAL	4943	150	0	0.00%	0.00%	0.000	0.000	100.00%
A/B	2472			0.00%	0.00%			100.00%	A/B	7669			0.00%	0.00%			100.00%	A/B	2472			0.00%	0.00%			100.00%
61% A/B	1335	75	0	0.00%	0.00%	0.000	0.000	100.00%	61% A/B	6016	75	0	0.00%	0.00%	0	0.00%	100.00%	61% A/B	1335	75	0	0.00%	0.00%	0.000	0.000	100.00%
DEC	1335	75	0	0.00%	0.00%	0.000	0.000	100.00%	DEC	7787	75	0	0.00%	0.00%	0	0.00%	100.00%	DEC	1335	75	0	0.00%	0.00%	0.000	0.000	100.00%
TOTAL	2670	150	0	0.00%	0.00%	0.000	0.000	100.00%	TOTAL	15337	150	0	0.00%	0.00%	0	0.00%	100.00%	TOTAL	2670	150	0	0.00%	0.00%	0.000	0.000	100.00%
A/B	1335			0.00%	0.00%			100.00%	A/B	7669			0.00%	0.00%			100.00%	A/B	1335			0.00%	0.00%			100.00%
(2)																										
MARITIME CORPS TOTALS																										
UNIV. SIZE	SAMPLE SIZE	NO. OF ERRORS	SAMPLE ERROR RATE	EST. UNIV. ERROR RATE	TTL. ERRORS	ERROR	ACCUR. PCT	UNIV. SIZE	SAMPLE SIZE	NO. OF ERRORS	SAMPLE ERROR RATE	EST. UNIV. ERROR RATE	TTL. ERRORS	ERROR	ACCUR. PCT	UNIV. SIZE	SAMPLE SIZE	NO. OF ERRORS	SAMPLE ERROR RATE	EST. UNIV. ERROR RATE	TTL. ERRORS	ERROR	ACCUR. PCT			
60% A/B	19426	1725	30	2.20%	2.20%	637,386,667	637,386,667	96.53%	60% A/B	19426	1725	30	2.20%	2.20%	637,386,667	637,386,667	96.53%	60% A/B	19426	1725	30	2.20%	2.20%	637,386,667	637,386,667	96.53%
DEC	18733	1725	16	0.93%	0.93%	333,126,667	333,126,667	98.21%	DEC	18733	1725	16	0.93%	0.93%	333,126,667	333,126,667	98.21%	DEC	18733	1725	16	0.93%	0.93%	333,126,667	333,126,667	98.21%
TOTAL	37259	3450	54	1.57%	1.57%	970,513,333	970,513,333	97.38%	TOTAL	37259	3450	54	1.57%	1.57%	970,513,333	970,513,333	97.38%	TOTAL	37259	3450	54	1.57%	1.57%	970,513,333	970,513,333	97.38%
DISPATCHING OFFICE WITH THE...																										
HIGHEST EST. ACCUR. PCT										100.00%																
LOWEST EST. ACCUR. PCT										99.97																
MARITIME CORPS ACCUR. RATE GOAL = 98%																										

MMPA AUDIT ANALYSIS=REASONS FOR OVERPAYMENTS=JUL thru DEC-1986

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
5136 AUG				
DEC				
TOTAL	\$0.00	0	\$0.00	0

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
5153 AUG				
DEC				
TOTAL	\$0.00	0	\$0.00	0

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
5159 AUG				
DEC				
TOTAL	\$0.00	0	\$0.00	0

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
5190 AUG	3	\$2,680.00	1	\$21.00
DEC	1	\$501.00		
TOTAL	4	\$3,181.00	1	\$21.00

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
5199 AUG				
DEC				
TOTAL	\$0.00	0	\$0.00	0

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
5755 AUG	2	\$2,642.00	1	\$5.00
DEC	1	\$681.00		
TOTAL	3	\$3,323.00	1	\$5.00

DSSN/MONTH	ELAP TIME	LEAVE BAL	VHA	TOTAL OVERPAYMENTS
NO.	\$ VALUE	NO.	\$ VALUE	NO.
6091 AUG	1	\$560.00		
DEC				
TOTAL	1	\$560.00	0	\$0.00

MMPA AUDIT ANALYSIS-REASONS FOR OVERPAYMENTS-JUL thru DEC-1986

ELAP TIME		LEAVE BAL		VHA		TOTAL OVERPAYMENTS	
DSSN/MONTH	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.
6805	AUG						
	DEC						
TOTAL	0	\$0.00	0	\$0.00	0	\$0.00	0

ELAP TIME		LEAVE BAL		VHA		TOTAL OVERPAYMENTS	
DSSN/MONTH	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.
6816	AUG						
	DEC						
TOTAL	0	\$0.00	0	\$0.00	0	\$0.00	0

ELAP TIME		LEAVE BAL		VHA		TOTAL OVERPAYMENTS	
CORPS ITL	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.
AUG	23	\$24,762.00	5	\$115.00	2	\$8.00	30
DEC	10	\$7,796.00	0	\$0.00	0	\$0.00	10
TOTAL	33	\$32,558.00	5	\$115.00	2	\$8.00	40
PERCENT OF TOTAL	82.50%	99.62%	12.50%	0.35%	5.00%	0.02%	100.00%

(4)

WPA AUDIT ANALYSIS-REASONS FOR UNDERPAYMENTS-JUL-thru DEC-1986

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
5136 AUG						\$0.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$0.00

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
5153 AUG						\$0.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$0.00

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
5159 AUG						\$0.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$0.00

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
5190 AUG						\$258.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$258.00

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
5199 AUG						\$0.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$0.00

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
5755 AUG						\$175.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$175.00

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO.	NO.	NO.	NO.	NO.	NO.	NO.
6031 AUG						\$0.00
DEC						\$0.00
TOTAL	0	0	0	0	0	\$0.00

PARA RUDITY ANALYSTS-REASONS FOR UNDERPAYMENTS-JUL thru DEC 1986

COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE
6805 AUG						
DEC						
TOTAL	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00

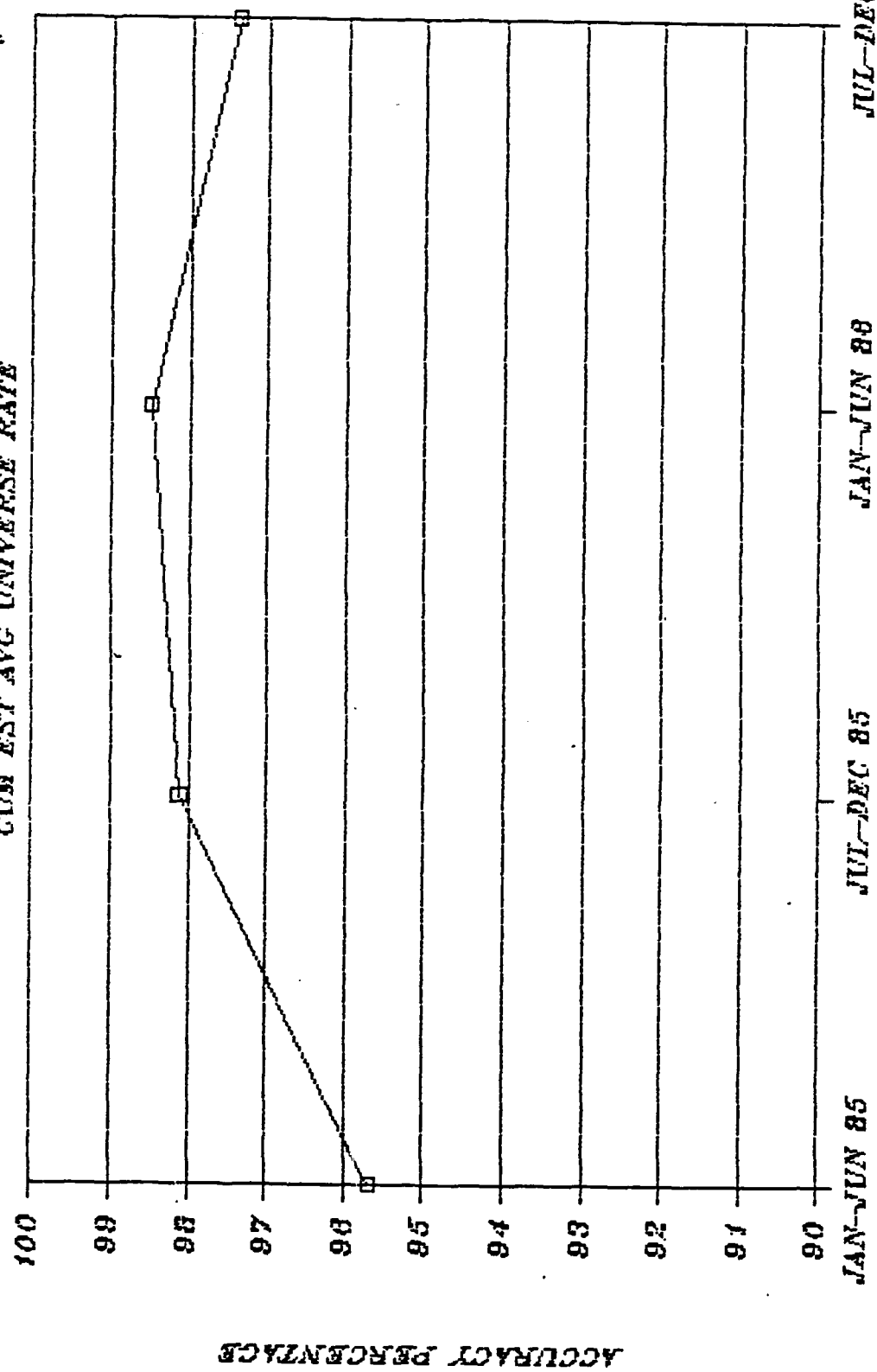
COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
DSSN/MONTH NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE
6816 AUG						
DEC						
TOTAL	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00

MARINE	COLA	ELAP TIME	LSL	LEAVE RATIONS	OTHER	VHA	TOTAL UNDERPAYMENTS
CDRPS TTL NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE	NO. \$ VALUE
AUG	1 \$175.00	2 \$250.00	1 \$41.00	1 \$68.00	1 \$519.00	2 \$275.00	8 \$1,329.00
DEC	2 \$162.00	3 \$1,205.00	0 \$0.00	0 \$0.00	0 \$0.00	0 \$0.00	5 \$1,367.00
TOTAL	3 \$337.00	5 \$1,455.00	1 \$41.00	1 \$68.00	1 \$519.00	2 \$275.00	13 \$2,696.00
PERCENT OF TOTAL	12.50%	53.97%	1.52%	2.52%	19.25%	10.24%	100.00%

(8)

MMPA ACCUR RATE FOR MARINE CORPS

CUM EST AVG UNIVERSE RATE



Encl (3)

MMPA AUDIT ANALYSIS (JULY-DECEMBER 1986)

Reasons for Advisory Errors

	Ac Dy Spouse		BAQ		Dep Info		BOC/EAS		Marital Status		PEED		RED		VIA		Other		Total Errors	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
<i>Nursing</i>																				
Administrative	8	6.3	12	9.5	31	24.6	27	21.4	21	16.7	2	1.6	17	13.5	2	1.6	6	4.8	126	100.0
TOTAL	8	6.3	12	9.5	31	24.6	27	21.4	21	16.7	2	1.6	17	13.5	2	1.6	6	4.8	126	100.0

MMPA AUDIT ANALYSIS (JULY-DECEMBER 1986)

Reasons for Administrative Monetary Errors

	Admin Errors Overpayments		Admin Errors Underpayments	
	No	Amt	No	Amt
BAQ				
			1	\$155.00
FSA	1	\$156.00	1	196.00
VHA	2	5.00	4	712.00
TOTAL	3	\$161.00	6	\$1,063.00



APPENDIX G
UNITED STATES MARINE CORPS
MARINE CORPS FINANCE CENTER
KANSAS CITY, MISSOURI 64197

IN REPLY REFER TO:
7220
QAS-15H

21 SEP 1987

From: Commanding Officer
To: Commandant of the Marine Corps (FDF)
Subj: ANALYSIS OF REENLISTMENT VOUCHERS (AUGUST 1987)
Ref: CMC ltr 7220 FDD-url-10 of Apr 85
Encl: (1) Analysis of errors by source and DSSN
(2) Reasons for SRB errors
(3) Reasons for excess leave errors
(4) Reasons for leave balance and LSL errors
(5) Reasons for advisory errors
(6) Reenlistment bonus error codes

1. Enclosures (1) through (5) respond to the reference and summarize results from our examination of sampled reenlistment vouchers for August 1987.

2. The overall estimated disbursing office monetary accuracy rate for August is 99 percent. This month's command accuracy rate is 83 percent. The majority (92%) of sample reenlistment voucher errors are advisory in nature.

3. Ninety-six percent (\$3,528.40) of all sample overpayments in August (\$3,661.11) are due to disbursing office errors. Eighty-three percent (\$3,038.05) of August's sample overpayment amount results from Selective Reenlistment Bonus (SRB) discrepancies. Eighty-three percent (\$2,527.30) of this month's sample SRB disbursing errors are due to miscomputations involving erroneous years and months of obligated service. Based on sample statistics, we estimate the total overpayment value of all reenlistment vouchers in August to be approximately \$7,700.


4. All of August's sample underpayment total (\$513.77) is due to disbursing SRB errors. Eighty-one percent (\$414.77) of this amount is due to one SRB Base Pay error involving erroneous rank. Based on sample statistics, we estimate the total underpayment value for all reenlistment vouchers in August to be approximately \$1,000.

5. Eight percent of August's sample advisory discrepancies involve disbursing errors. About sixty-two percent of these errors result from using incorrect numbers of years for installment plans. Ninety-two percent of August's sample advisory discrepancies involve administrative errors. Thirty-six percent of administrative errors involve incorrect expirations of current contracts (ECC's).

Subj: ANALYSIS OF REENLISTMENT VOUCHERS (AUGUST 1987)

6. Enclosure (6) lists codes used for classifying errors in enclosures (2) through (5).

7. Refer questions or comments concerning this report to the Statistical Analysis Office (QAS).

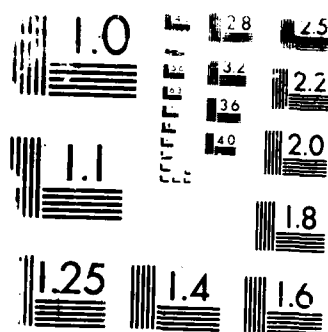

A. G. EMERY
By direction

AN ANALYSIS OF EFFECTIVENESS MEASUREMENT IN THE MARINE
CORP MILITARY PAY SYSTEM(U) NAVAL POSTGRADUATE SCHOOL
MONTEREY CA D A JENKINS DEC 87

UNCLASSIFIED

F/G 5/1

ML



Resolution Test Chart

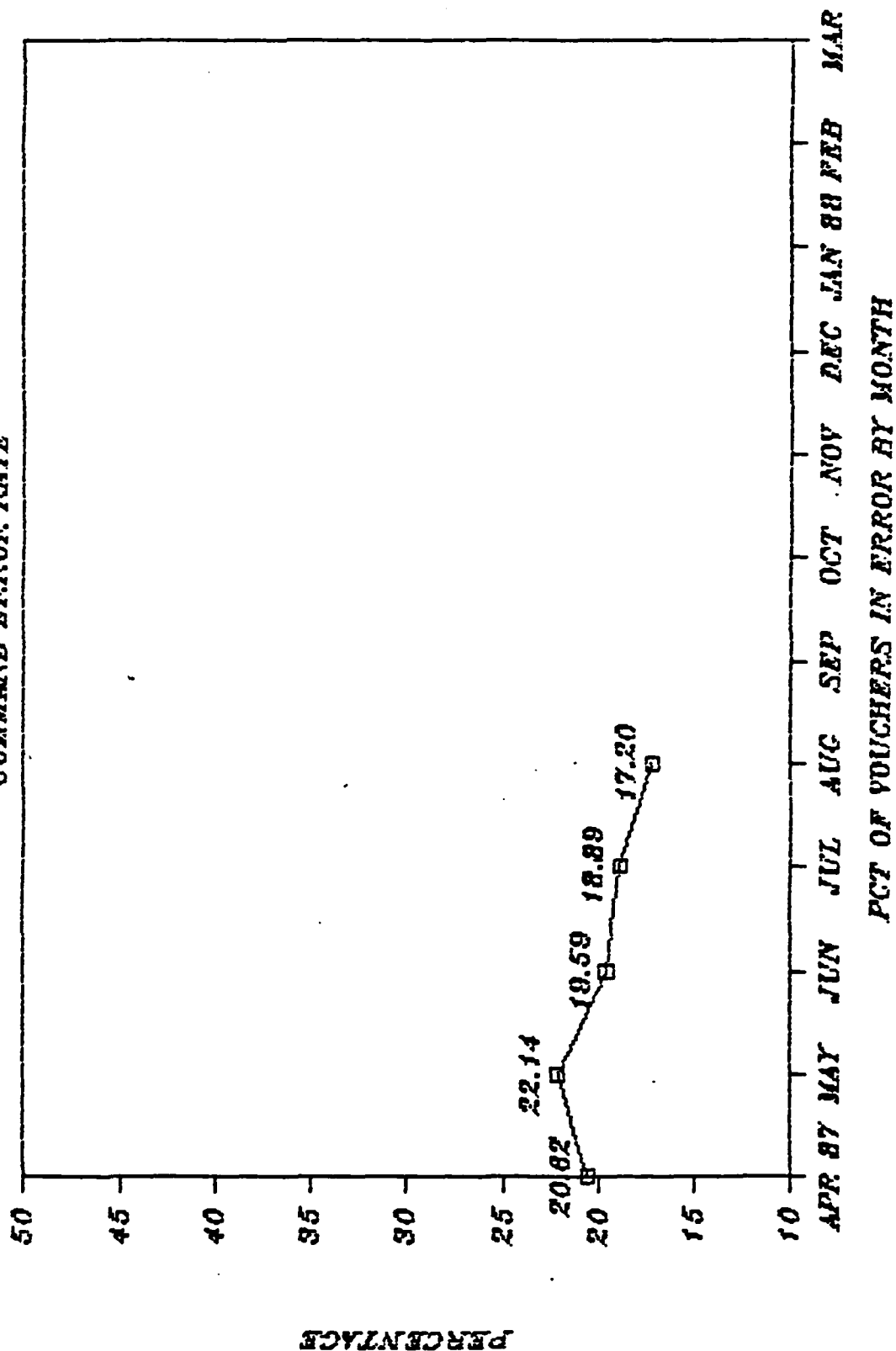
創刊 1993

Foot not on

The Marine Corps SSB Accuracy Rate Goal = 90%

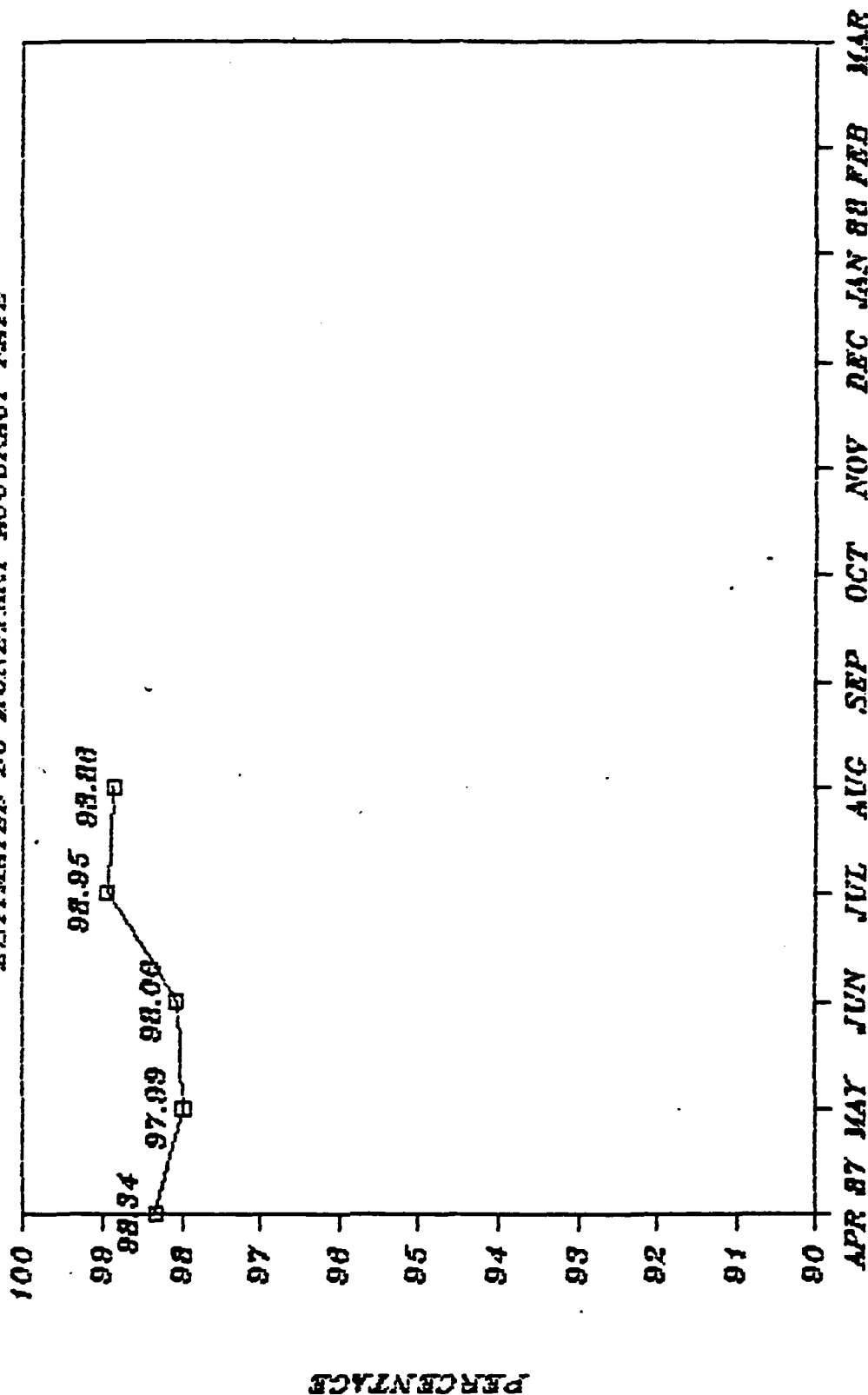
MARINE CORPS REENLISTMENT VOUCHERS

COMMAND ERROR RATE



MARINE CORPS REENLISTMENT VOUCHERS

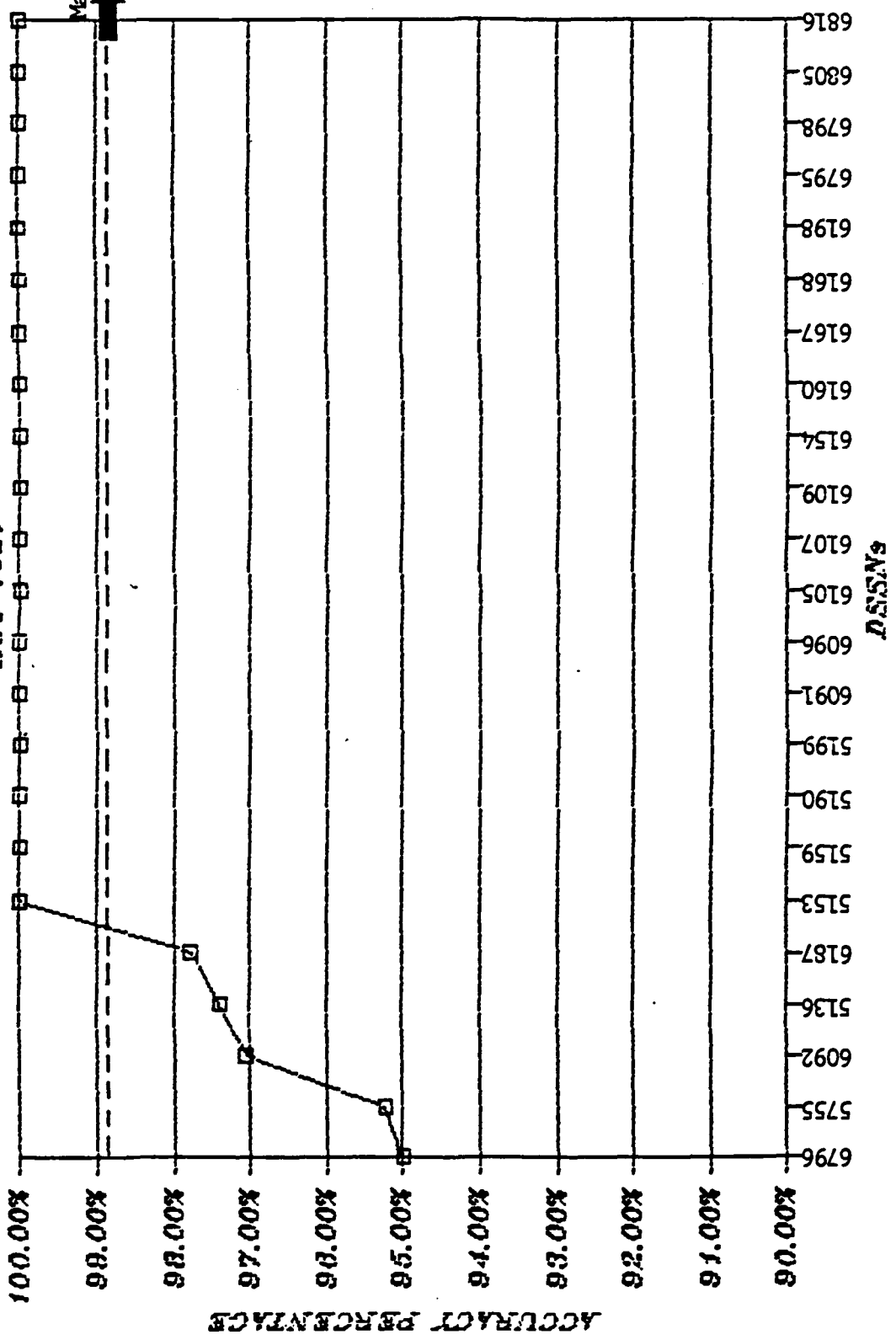
ESTIMATED DO MONETARY ACCURACY RATE



APR 1987 - MAR 1988

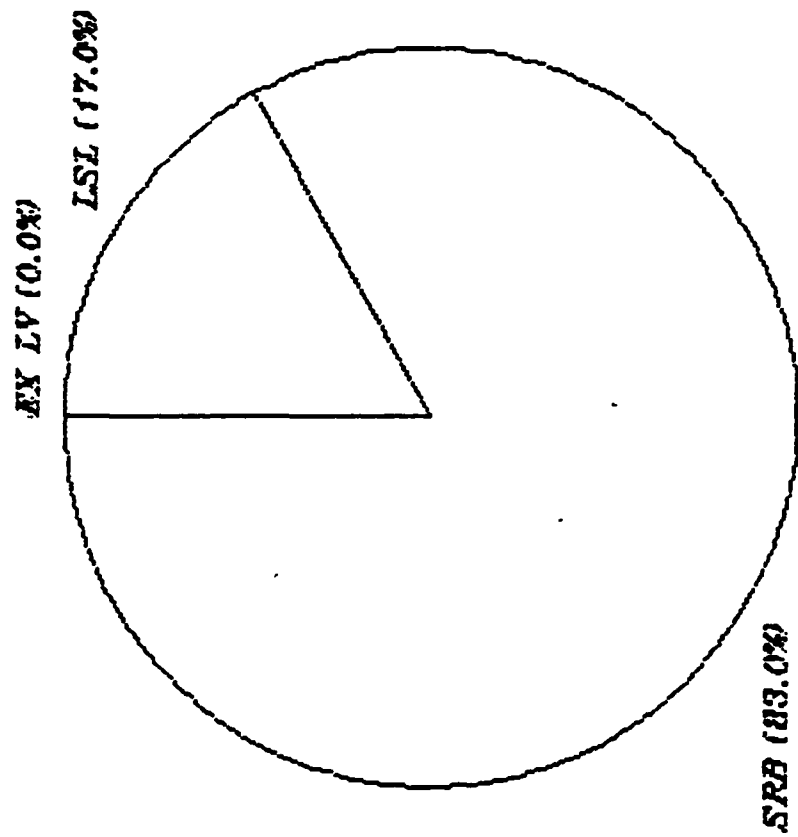
REENLISTMENT VOUCHER (SRB) ACCUR RATE

AUG 1987



MARINE CORPS REENLISTMENT VOUCHERS

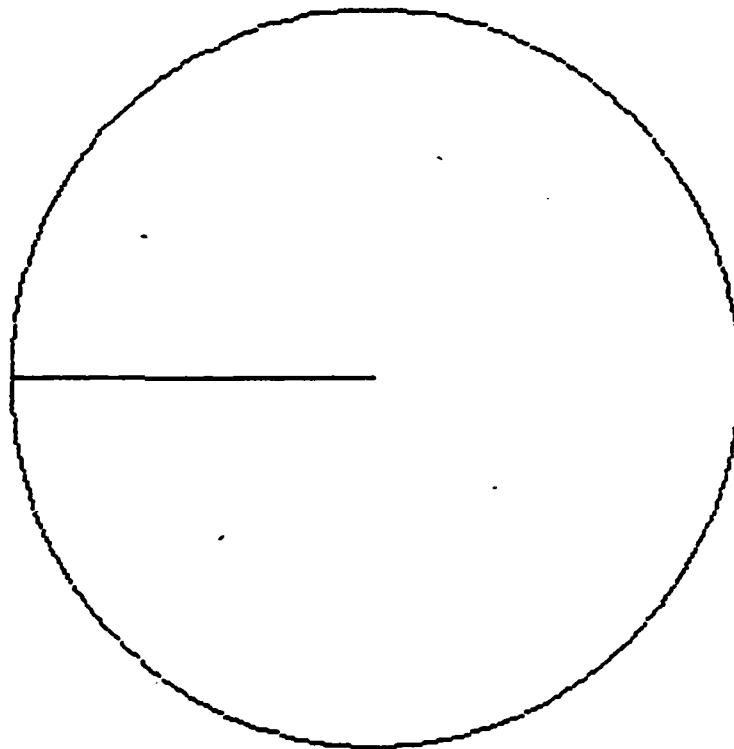
PCT OF DOLLARS BY CATEGORY: AUG 1987



MARINE CORPS REENLISTMENT VOUCHERS

PCT UP DOLLARS BY CATEGORY: AUG 1987

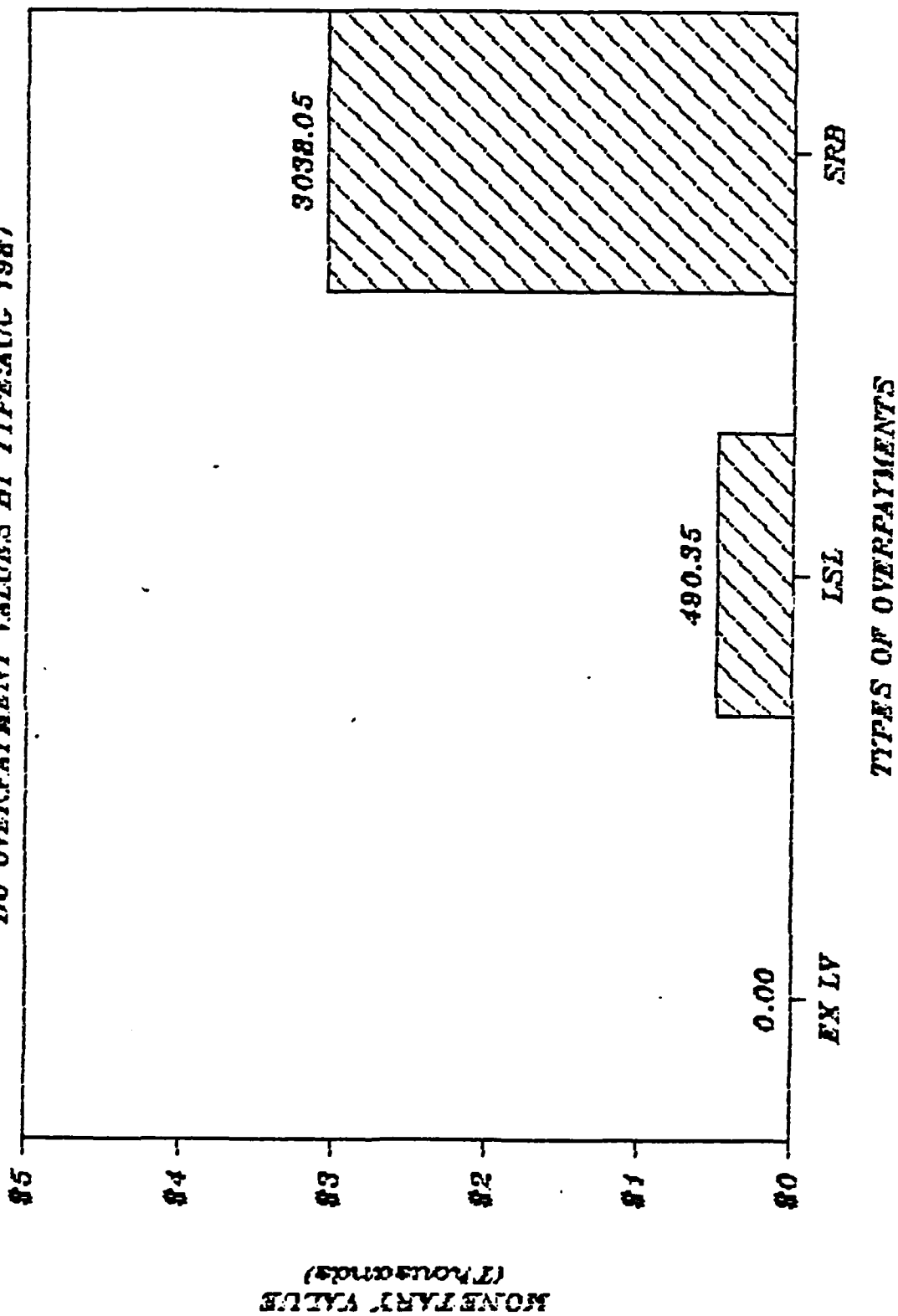
ExLv (0.0%) LSL



SRB (100.0%)

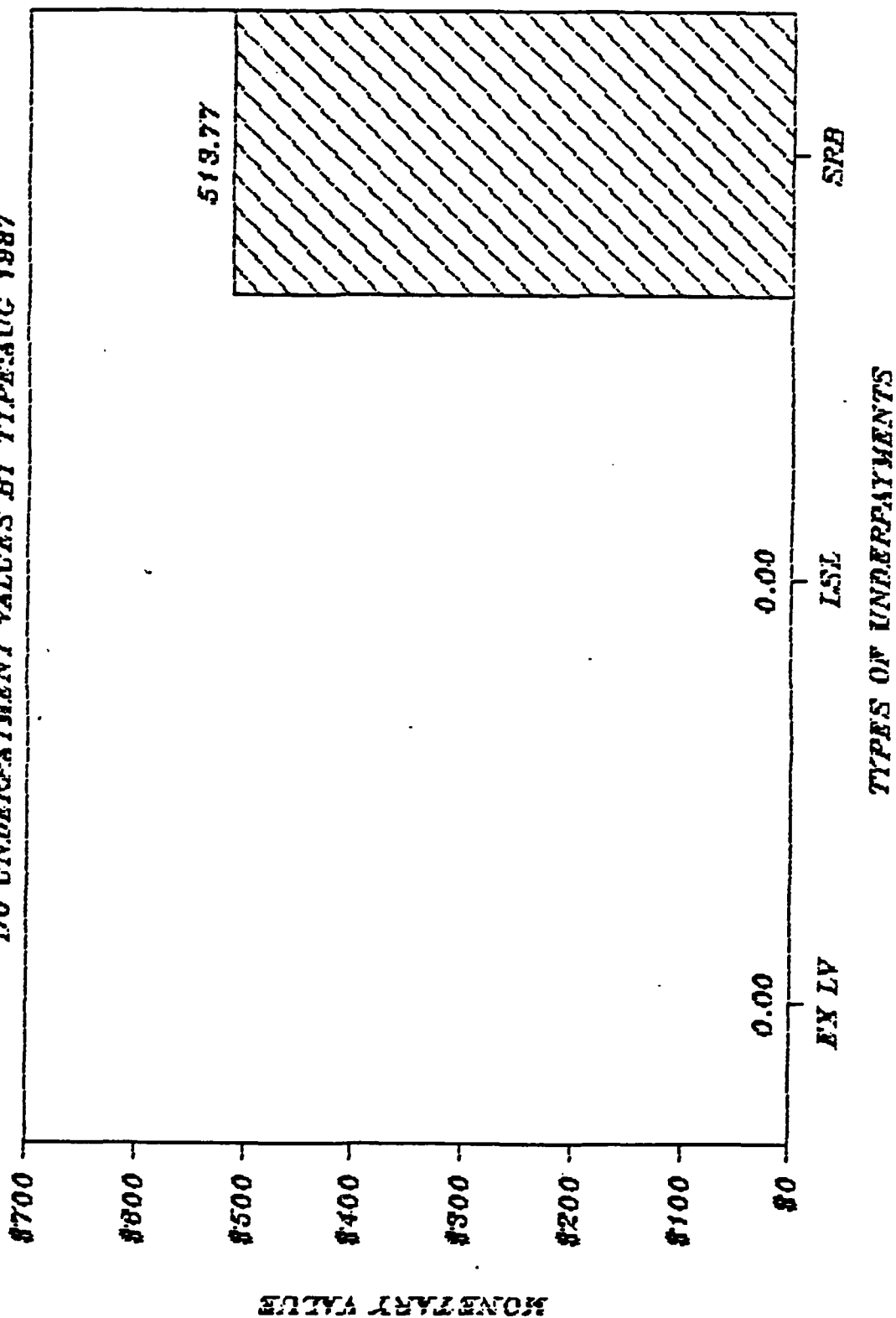
MARINE CORPS REENLISTMENT VOUCHERS

DO OVERPAYMENT VALUES BY TYPE: AUG 1987



MARINE CORPS REENLISTMENT VOUCHERS

DO UNDERPAYMENT VALUES BY TYPE: AUG 1987



DSGN	JE A1 NO.	\$ VALUE	CODE A2 NO.	\$ VALUE	CODE A3 NO.	\$ VALUE	CODE B1 NO.	\$ VALUE	CODE B2 NO.	\$ VALUE	CODE B3 NO.	\$ VALUE	CODE B4 NO.	\$ VALUE
5136							1	\$510.75						
5153														
5159														
5190														
5199														
5755							1	\$1,950.40						
6091														
6092														
6096														
6105														
6107														
6109														
6154														
6160														
6167														
6168														
6187							1	\$345.50						
6190														
6795														
6796							1	\$220.40						
6798														
6805														
6816														
MC TOTAL	0	\$0.00	0	\$0.00	3	\$2,527.30	1	\$510.75	0	\$0.00	0	\$0.00	0	\$0.00
PCT OF														
TOTAL	0.00%	0.00%	0.00%	0.00%	73.00%	83.19%	25.00%	16.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Monetary error categories attributed to disbursing offices

Encl (2)

REASONS FOR OVERPAYMENTS - 908's (cont'd)

DISN	NO.	C1		C2		C3		D1		D2		MARINE CORPS		TOTAL DO	
		\$	VALUE	NO.	VALUE	NO.	VALUE	NO.	VALUE	NO.	VALUE	NO.	VALUE	MONETARY ERRORS	MONETARY \$ VALUE
5136												1	\$510.75	1	\$510.75
5153												0	\$0.00	0	\$0.00
5159												0	\$0.00	0	\$0.00
5190												0	\$0.00	0	\$0.00
5199												0	\$0.00	0	\$0.00
5733												1	\$1,958.40	1	\$1,958.40
6091												0	\$0.00	0	\$0.00
6092												0	\$0.00	0	\$0.00
6096												0	\$0.00	0	\$0.00
6105												0	\$0.00	0	\$0.00
6107												0	\$0.00	0	\$0.00
6109												0	\$0.00	0	\$0.00
6154												0	\$0.00	0	\$0.00
6160												0	\$0.00	0	\$0.00
6167												0	\$0.00	0	\$0.00
6168												0	\$0.00	0	\$0.00
6187												1	\$346.50	1	\$346.50
6198												0	\$0.00	0	\$0.00
6793												0	\$0.00	0	\$0.00
6796												1	\$228.40	1	\$228.40
6798												0	\$0.00	0	\$0.00
6805												0	\$0.00	0	\$0.00
6816												0	\$0.00	0	\$0.00
MC TOTAL		0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	4	\$3,838.05	4	\$3,838.05
PCT OF															
TOTAL		0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	100.00%	100.00%

Monetary error categories attributed to disbursing offices

REASONS FOR UNDERPAYMENTS - SIB's (cont)

DESN	ML	C1	CODE C2		CODE C3		CODE D1		JE D2	MARINE CORPS		TOTAL DO		
			\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.		\$ VALUE	NO.	MONETARY ERRORS	MONETARY \$ VALUE	
5136											0	\$0.00	0	\$0.00
5153											0	\$0.00	0	\$0.00
5159											0	\$0.00	0	\$0.00
5190											0	\$0.00	0	\$0.00
5199											0	\$0.00	0	\$0.00
5735											0	\$0.00	0	\$0.00
6031											0	\$0.00	0	\$0.00
6032											1	\$414.77	1	\$414.77
6036											0	\$0.00	0	\$0.00
6105											0	\$0.00	0	\$0.00
6107											0	\$0.00	0	\$0.00
6109											0	\$0.00	0	\$0.00
6154											0	\$0.00	0	\$0.00
6160											0	\$0.00	0	\$0.00
6167											0	\$0.00	0	\$0.00
6168											0	\$0.00	0	\$0.00
6187											0	\$0.00	0	\$0.00
6190											0	\$0.00	0	\$0.00
6795											0	\$0.00	0	\$0.00
6796								1	\$99.00		1	\$99.00	1	\$99.00
6798											0	\$0.00	0	\$0.00
6805											0	\$0.00	0	\$0.00
6816											0	\$0.00	0	\$0.00
MC TOTAL			0	\$0.00	0	\$0.00	0	\$0.00	1	\$99.00	0	\$0.00	2	\$513.77
ACT OF														
TOTAL			0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	19.27%	0.00%	0.00%	100.00%	100.00%	100.00%

Monetary error categories attributed to disbursing offices

[illegible]

Monetary error categories attributed to disbursing officers

RECORDS FOR UNDERPAYMENTS - EXCESS LEASE (RUB 1987)

BSNM	CODE E1	CODE E2	CODE E3	CODE E4	CODE E5	CODE E6	CODE E7	MAINTENANCE	TOTAL NO	TOTAL NO
	NO.	VALUE	NO.	VALUE	NO.	VALUE	NO.	NO.	NO.	NO.
3130		0	0	0	0	0	0	0	0	0
3133		0	0	0	0	0	0	0	0	0
3139		0	0	0	0	0	0	0	0	0
3138		0	0	0	0	0	0	0	0	0
3139		0	0	0	0	0	0	0	0	0
3735		0	0	0	0	0	0	0	0	0
6031		0	0	0	0	0	0	0	0	0
6032		0	0	0	0	0	0	0	0	0
6036		0	0	0	0	0	0	0	0	0
6105		0	0	0	0	0	0	0	0	0
6107		0	0	0	0	0	0	0	0	0
6109		0	0	0	0	0	0	0	0	0
6154		0	0	0	0	0	0	0	0	0
6160		0	0	0	0	0	0	0	0	0
6167		0	0	0	0	0	0	0	0	0
6168		0	0	0	0	0	0	0	0	0
6169		0	0	0	0	0	0	0	0	0
6170		0	0	0	0	0	0	0	0	0
6171		0	0	0	0	0	0	0	0	0
6172		0	0	0	0	0	0	0	0	0
6173		0	0	0	0	0	0	0	0	0
6174		0	0	0	0	0	0	0	0	0
6175		0	0	0	0	0	0	0	0	0
6176		0	0	0	0	0	0	0	0	0
6178		0	0	0	0	0	0	0	0	0
6185		0	0	0	0	0	0	0	0	0
6116		0	0	0	0	0	0	0	0	0
AC TOTAL		0	0	0	0	0	0	0	0	0
ACT OF		0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0

(2)

Inventory error categories attributed to disbursing offices

10

Monetary error categories attributed to disbursing offices

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Encl (4)

PERSONS FOR UNDERPAYMENTS - L3 (AUG 1987)

DSSN	JE 61		CODE 62		CODE 63		CODE 64		JE 65		CODE 66		MARINE CORPS		TOTAL		MONETARY \$ VALUE
	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	NO.	\$ VALUE	MONETARY ERRORS		
5136													0	10.00	0	10.00	
5153													0	10.00	0	10.00	
5159													0	10.00	0	10.00	
5190													0	10.00	0	10.00	
5199													0	10.00	0	10.00	
5733													0	10.00	0	10.00	
6091													0	10.00	0	10.00	
6092													0	10.00	0	10.00	
6096													0	10.00	0	10.00	
6105													0	10.00	0	10.00	
6107													0	10.00	0	10.00	
6109													0	10.00	0	10.00	
6154													0	10.00	0	10.00	
6160													0	10.00	0	10.00	
6167													0	10.00	0	10.00	
6168													0	10.00	0	10.00	
6187													0	10.00	0	10.00	
6198													0	10.00	0	10.00	
6735													0	10.00	0	10.00	
6796													0	10.00	0	10.00	
6798													0	10.00	0	10.00	
6805													0	10.00	0	10.00	
6816													0	10.00	0	10.00	
MC TOTAL	0	10.00	0	10.00	0	10.00	0	10.00	0	10.00	0	10.00	0	10.00	0	10.00	
ACT OF																	
TOTAL	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	

(2)

Monetary error categories attributed to disbursing offices

REASONS FOR ADVISORY ERRORS (AUG 1987)

CODE H1 NO.	CODE H2 NO.	CODE H3 NO.	CODE H4 NO.	TOTAL DISB	CODE 11 NO.	CODE 12 NO.	CODE 13 NO.	CODE 14 NO.	TOTAL ADMIN	MARINE CORPS TOTAL
5136				0	1	3		4	8	8
5153	1			1	4	1		2	7	8
5159				0					0	0
5198	1			1					1	1
5199				0					0	0
5755		1		1		1			1	2
6091				0					0	0
6092	1	1		2	4	1		6	13	15
6096				0		1		3	4	4
6105				0	1	1			2	2
6107				0					0	0
6109				0					2	2
6154				0	3		1	1	5	5
6160				0	2			2	4	4
6167	1			1	2	1	1	1	5	6
6168		1		1		1			1	2
6187				0	3	1	1	6	11	11
6198				0	3	1		1	5	5
6795				0	1	1	1	3	6	6
6796	1			1	3	1		1	5	6
6798				0	2			2	4	4
6805				0	1				1	1
6816				0	2			3	5	5
MC TOTAL	5	0	3	0	32	14	4	39	89	97
PCT OF										
TOTAL	62.50%	0.00%	37.50%	0.00%	8.25%	15.73%	4.49%	43.82%	91.75%	100%

Encl (5)

REENLISTMENT BONUS ERROR CODES

SRB ERRORS - DISBURSING - MONETARY

- A. Miscomputation
 - 1. Erroneous Multiples
 - 2. Paid more than 16 years service (Zone C)
 - 3. Erroneous years and months obligated service
- B. Base Pay Errors
 - 1. Erroneous PEBD
 - 2. Erroneous Rank
 - 3. Paid BP at reenlistment date vs discharge date
 - 4. Pay raise not considered - (Normally January reenlistment)
- C. Non-Entitlement
 - 1. Per MCO applicable at reenlistment date
 - 2. MOS not entitled
 - 3. ALMAR used not applicable
- D. Miscellaneous
 - 1. Transposed dollar amount from 11060 endorsement to MMPA
 - 2. All other

ERRORS IN LEAVE ACCOUNTING

- E. Excess Leave
 - 1. D.O. failed to check
 - 2. D.O. erroneously checking for excess leave
 - *3. ECC not updated causes erroneous checkage
 - **4. Leave reported late and not checked
 - 5. Non-accrual not considered or erroneous
 - 6. All entitlements not properly checked
 - 7. All other
- F. Leave Balance Update
 - *1. Dropped to zero on discharge
 - *2. LSL not deducted from leave account after paid
 - 3. All other
- G. LSL Errors
 - 1. LSL paid on C of G discharge
 - *2. Paid in excess of 60 days career LSL
 - **3. Paid more leave than had accrued
 - *4. Erroneous BP (PEBD, Rank, Pay Raises, etc.)
 - **5. 947 page (career LSL) not updated
 - 6. All other

Enclosure (6)

ADVISORY ERRORS

H. Disbursing Errors

1. Incorrect number of years used for installment plans
2. SRB failed to post to MMPA
3. Anniversary/reenlistment date incorrect on MMPA
4. All other

I. Administrative Errors

1. Incorrect Expiration of Current Contract (ECC)
2. Incorrect Pay Entry Base Date (PEBD)
3. PMOS incorrect in MMPA
4. All other

(*) Errors attributed to CO

(**) Errors attributed to CO and DO (JFPM 10301.4)



APPENDIX H

UNITED STATES MARINE CORPS

MARINE CORPS FINANCE CENTER
KANSAS CITY, MISSOURI 64197-0001

IN REPLY REFER TO:
7220/7
SEP
SEP 03 1987

From: Commanding Officer
To: Commandant of the Marine Corps (FDF), Headquarters
U.S. Marine Corps, Washington, DC 20380-0001

Subj: JULY 1987 OVERPAYMENTS PROCESSED BY SEPARATIONS BRANCH

- (1) July 1987 Changes/Additions to Post Audit Definitive Coding for Overpayments and Payments After Discharge
- (2) Listing of Overpayments to According to Category of Overpayment
- (3) Effect of Discharges Before ECC (Early Outs) on Total Overpayments
- (4) Breakdown of Records Received and Overpaid Amount by DSSN
- (5) DSSN Summary of Total Overpaid, Early Outs, and Received as Overpaid
- (6) Comparison of Overpayments Identified by DO to All Overpayments
- (7) Records Forwarded Without Discharge Drop Entries

1. This report identifies primary overpayments at discharge to include the leading reasons of overpayments, the common conditions leading to overpayment, and the major sources of overpayments. The root of this report is assigned codes from the Post Audit Definitive Coding for Overpayments and Payments After Separation. Enclosure (1) is included for pen changes to existing codes. The enclosure that records the total count and amount for each existing code for July 1987 report period will be provided in the August 1987 report along with totals and count for the current August statistics.

2. Statistics for the period of Oct 1985 through Jul 1987 have confirmed 5 leading reasons of overpayments--payments, allotments, excess leave, bonus recoupments, and advance pay. These reasons attribute a constant 67% or 4518 occurrences and 82% or \$3,528,167 of the FY 87 YTD overpaid amount as indicated in Enclosure (2). The same 5 reasons for overpayment are highlighted for the last 10 months in Enclosure (3). "Early Outs" affect 70.9% of occurrences and 86.1% of the overpaid amount for the July 1987 report period.

3. Enclosure (4) provides the count and percentage of total records received in FY 87 YTD. Sixteen (16) DSSN's represent 98.5% of records received and 96.2% of the overpaid amount. Column 1 shows the ratio of records received to FY 87 YTD overpayments amount by DSSN. The fluctuating timeframe of processing records prevents the correlation of records received monthly to overpayments processed monthly.

4. Seventy percent of all overpayments are received from 6 DSSN's -- DSSN's 5136, 5190, 6092, 6167, 6187, and 6796. Enclosure (5) displays statistics showing the 6 DSSN's cover approximately 70% of:

- total count and overpaid amount
- early discharge overpayments that evade system edits at normal ECC
- cases received as overpaid (overpayments identified by DO), the master key to debt reduction

5. Enclosure (6) indicates the disbursing offices identified 53.6% of occurrences and 67.6% of overpaid amount for all records processed. The awareness at field level of overpayment potential prior to final settlement stymies any continual rise in separation overpayments.

6. Enclosure (7) lists cases requiring discharge drop action by MCFC for the report month. Thirty six (36) records were received from 13 DSSN's without discharge drop action. The monthly average for this calendar year is 47% lower (61 cases) than the average of 115 cases per month for the period Jan 1985 through Dec 1986. This downward trend for this calendar year exemplifies results of this report -- a tool for both disbursing and administrative activities. Breakdown of the 36 records by DSSN is as follows:

DSSN	RECORDS RECEIVED	PERCENTAGE
6187	6	17
5190	4	11
5755	4	11
5153	3	8
6092	3	8
6160	3	9
6167	3	8
6795	3	8
5136	2	6
6105	2	6
5116	1	3
6796	1	3
6798	1	3

7. July 1987 reports for individual DSSN's include an Enclosure (3), Overpayments for DSSN 7777 for July 1987. This enclosure lists the assigned code for reason of overpayment with added indicator of controllable area, either disbursing, administrative, or policy/procedures. Preliminary indications are that policy/procedures are predominant factors in overpayments at separation. Continued monitoring of those factors could well provide sufficient statistical documentation for proposed changes. Copies of reports for sixteen DSSN's are attached.

for M. M. ENDICOTT
By direction

LISTING OF DEDEMENTS ACCORDING TO CATEGORY OF DEDEMENT

DEDEMENT	PERCENT	FE 87	SEASON	DET 86	NOV 86	DEC 86	JAN 87	FEB 87	MAR 87	APR 87	MAY 87	JUNE 87	JULY 87	FE 87	SEASON TO DATE
11.00 PARENTS	24.33	113,645.93	26,118,187,449.81	21.41	118,586.45	24.83	121,552.48	28.73	131,752.44	29.44	149,979.16	24.41	177,518.99	19.41	81,436,179.24
16.00 EXCESS LEASE	4.41	679,433.35	6.83	636,136.35	7.71	639,871.39	8.91	636,898.92	7.31	618,077.55	6.83	636,178.25	6.91	679,433.35	7.31
9.00 ALLIEMENTS	4.21	624,696.44	3.71	623,284.19	4.41	626,563.57	4.71	618,258.49	4.31	615,251.18	3.71	619,213.41	3.71	617,467.99	4.41
8.20 SOLID PARENTS/	37.11	1155,347.38	35,433,231,874.29	46.31	1152,378.96	35.31	1147,396.11	34.91	1122,742.57	35.41	1158,998.18	39.81	1177,412.36	44.41	81,719,349.46
8.00 PARENTS	5.81	623,419.44	3.41	621,409.44	4.31	623,583.28	7.31	621,533.83	5.11	618,112.81	7.41	623,396.39	8.31	628,452.78	5.11
5.70 SERVICE PAY	3.71	97,982.73	1.83	111,115.42	2.21	115,717.86	3.71	119,451.19	2.31	113,648.11	3.81	115,597.49	2.11	117,878.15	2.71
4.00 PURCHASES/PIES	3.81	114,254.87	3.31	114,284.97	2.71	114,116.14	2.11	114,173.31	1.91	114,957.82	2.41	115,956.16	1.81	117,878.15	2.71
4.70 TRANSPORTATION/	3.81	114,254.87	3.31	114,284.97	2.71	114,116.14	2.11	114,173.31	1.91	114,957.82	2.41	115,956.16	1.81	117,878.15	2.71
TRAVEL ALLOWANCE	3.81	114,254.87	3.31	114,284.97	2.71	114,116.14	2.11	114,173.31	1.91	114,957.82	2.41	115,956.16	1.81	117,878.15	2.71
3.70 COUNCILING PAY	3.81	114,254.87	3.31	114,284.97	2.71	114,116.14	2.11	114,173.31	1.91	114,957.82	2.41	115,956.16	1.81	117,878.15	2.71
3.70 COUNCILING PAY	3.81	114,254.87	3.31	114,284.97	2.71	114,116.14	2.11	114,173.31	1.91	114,957.82	2.41	115,956.16	1.81	117,878.15	2.71
3.00 LUMP SUM LEASE	1.11	61,898.25	0.41	66,933.55	1.41	62,725.45	0.41	66,744.45	0.11	64,199.83	1.21	67,373.96	0.81	61,975.33	0.81
2.50 GOVERNMENT PROPERTY	1.01	51,451.52	0.81	52,623.93	1.01	54,787.41	1.11	52,468.45	3.01	52,415.76	0.81	51,885.84	3.11	52,771.45	1.51
2.00 SUBSISTENCE	0.81	62,438.98	0.41	63,989.48	0.81	63,212.43	0.71	63,319.97	0.81	64,283.76	1.21	61,826.82	0.31	64,819.43	0.81
1.00 SERVICE/REPAIR	0.71	61,844.44	0.31	61,974.12	0.41	64,684.99	0.11	63,943.35	0.91	61,382.93	0.41	61,467.48	0.71	62,564.85	0.11
1.00 TAXES	0.71	61,844.44	0.31	61,974.12	0.41	64,684.99	0.11	63,943.35	0.91	61,382.93	0.41	61,467.48	0.71	62,564.85	0.11
1.50 VARIABLE HOUSING	1.11	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.70 ALIQUATION OF	1.01	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
INTERESTS	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.70 MEDICAL/QUARTERS	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.70 MEDICAL ALLOWANCE	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.50 S&I	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.10 SPECIAL DUTY/MAINTENANCE	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
DUTY/INCENTIVE PAY	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.10 S&I/SEMI/TAI LEVIES	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.00 REDEMPTION/SEPARATION	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11
0.00 BIRTHDAY SEVERANCE PAY	0.71	62,488.98	0.41	63,479.43	0.71	62,818.61	0.71	61,491.23	0.41	62,491.16	1.41	62,330.76	0.41	64,298.25	1.11

6432,446.16 6433,849.48 6581,884.62 6479,177.71 6422,786.92 6343,525.47 6414,818.84 6394,816.44 6379,527.75 6399,152.11 641,561,615.22

EFFECT OF DISCHARGES PRIOR TO ECC (EARLYOUT)
ON TOTAL OVERPAYMENTS

	ALL OVERPAID COUNT	EARLYOUT COUNT	EARLYOUT %	ALL OVERPAID AMOUNT	EARLYOUT AMOUNT	EARLYOUT AMOUNT %
FOR ALL OVERPAID RECORDS						
ICT 86	837	519	62.0%	\$432,446.16	\$298,242.82	69.0%
IOV 86	738	457	61.9%	\$435,849.48	\$301,402.24	69.2%
DEC 86	749	478	63.8%	\$501,084.62	\$365,040.06	72.8%
JAN 87	654	442	67.6%	\$429,127.21	\$327,427.37	76.3%
FEB 87	722	510	70.6%	\$422,286.92	\$320,211.81	75.8%
MAR 87	460	304	66.1%	\$343,525.47	\$255,614.57	74.4%
APR 87	627	418	66.7%	\$614,618.84	\$442,002.98	71.9%
MAY 87	427	303	71.0%	\$394,016.66	\$308,379.22	78.3%
JUN 87	359	276	76.9%	\$329,527.75	\$281,329.31	85.4%
JUL 87	388	275	70.9%	\$399,132.11	\$343,659.10	86.1%

FOR OVERPAYMENTS CAUSED BY PAYMENTS

ICT 86	272	162	59.6%	\$105,968.78	\$60,232.29	56.8%
IOV 86	255	139	54.5%	\$113,645.93	\$60,205.21	53.0%
DEC 86	226	131	58.0%	\$107,049.81	\$62,422.98	58.3%
JAN 87	215	126	58.6%	\$106,506.65	\$57,822.83	54.3%
FEB 87	242	151	62.4%	\$121,352.40	\$69,910.85	57.6%
MAR 87	218	136	62.4%	\$101,752.66	\$58,838.74	57.8%
APR 87	264	153	58.0%	\$149,928.88	\$74,511.78	49.7%
MAY 87	178	115	64.6%	\$97,122.89	\$56,347.40	58.0%
JUN 87	127	86	67.7%	\$55,290.89	\$36,711.73	66.4%
JUL 87	142	88	62.0%	\$77,510.09	\$47,349.83	61.1%

FOR OVERPAYMENTS CAUSED BY ALLOTMENTS

ICT 86	97	45	46.4%	\$26,696.66	\$10,475.34	39.2%
IOV 86	86	42	48.8%	\$24,929.22	\$11,475.41	46.0%
DEC 86	78	40	51.3%	\$23,284.19	\$13,765.46	59.1%
JAN 87	66	42	63.6%	\$20,365.57	\$12,186.19	59.8%
FEB 87	66	44	66.7%	\$18,258.69	\$12,178.82	66.7%
MAR 87	46	29	63.0%	\$13,251.10	\$7,039.17	53.1%
APR 87	63	42	66.7%	\$19,213.41	\$12,175.00	63.4%
MAY 87	42	27	64.3%	\$13,773.49	\$9,602.39	69.7%
JUN 87	34	23	67.6%	\$14,292.94	\$8,837.71	61.8%
JUL 87	42	30	71.4%	\$29,876.90	\$14,064.61	47.1%

ENCLOSURE (3)

FOR OVERPAYMENTS CAUSED BY EXCESS LEAVE

OCT 86	92	66	71.7%	\$28,596.93	\$19,838.03	69.4%
NOV 86	82	59	72.0%	\$29,633.55	\$22,374.73	75.5%
DEC 86	85	54	63.5%	\$36,138.25	\$27,412.21	75.9%
JAN 87	76	64	84.2%	\$38,071.39	\$34,034.14	89.4%
FEB 87	76	61	80.3%	\$30,898.92	\$23,458.41	75.9%
MAR 87	55	46	83.6%	\$18,077.40	\$15,076.47	83.4%
APR 87	90	75	83.3%	\$42,029.73	\$33,907.59	80.7%
MAY 87	70	53	75.7%	\$30,178.55	\$26,108.74	86.5%
JUN 87	69	60	87.0%	\$29,376.42	\$24,068.59	81.9%
JUL 87	70	61	87.1%	\$29,876.90	\$28,143.64	94.2%

FOR OVERPAYMENTS CAUSED BY RECOUPMENTS

OCT 86	65	54	83.1%	\$160,543.83	\$135,731.04	84.5%
NOV 86	51	45	88.2%	\$155,347.38	\$139,600.49	89.9%
DEC 86	76	69	90.8%	\$231,871.29	\$201,037.92	86.7%
JAN 87	56	49	87.5%	\$152,379.96	\$138,445.08	90.9%
FEB 87	61	56	91.8%	\$147,396.11	\$137,020.74	93.0%
MAR 87	46	43	93.5%	\$122,242.57	\$115,826.59	94.8%
APR 87	82	72	87.8%	\$257,399.97	\$219,762.54	85.4%
MAY 87	62	56	90.3%	\$156,994.10	\$140,306.24	89.4%
JUN 87	63	62	98.4%	\$154,656.94	\$152,308.79	98.5%
JUL 87	69	69	100.0%	\$177,412.30	\$177,412.30	100.0%

FOR OVERPAYMENTS CAUSED BY ADVANCE PAY

OCT 86	38	27	71.1%	\$25,280.01	\$17,996.51	71.2%
NOV 86	36	31	86.1%	\$23,470.64	\$21,783.84	92.8%
DEC 86	36	33	91.7%	\$21,459.64	\$18,528.90	86.3%
JAN 87	39	33	84.6%	\$32,303.20	\$28,813.33	89.2%
FEB 87	36	29	80.6%	\$21,533.85	\$15,406.94	71.5%
MAR 87	30	24	80.0%	\$18,112.01	\$13,224.81	73.0%
APR 87	59	44	74.6%	\$46,355.90	\$33,255.14	71.7%
MAY 87	41	38	92.7%	\$31,921.79	\$27,518.56	86.2%
JUN 87	29	26	89.7%	\$27,396.59	\$24,087.21	87.9%
JUL 87	27	23	85.2%	\$20,452.78	\$18,284.74	89.4%

ENCLOSURE (3)

BREAKDOWN OF RECORDS RECEIVED AND OVERPAID AMOUNT BY DSSN

	RECORDS RECEIVED		OVERPAID AMOUNT		AVERAGE OVERPAID AMOUNT
DSSN	FY 87		FY 87		
6187	9999	23.1%	\$1,266,424.59	29.4%	\$126.66
6092	5705	13.2%	\$548,511.18	12.8%	\$96.15
5153	4131	9.5%	\$116,754.26	2.7%	\$28.26
6167	4221	9.7%	\$422,458.67	9.8%	\$100.08
6798	3632	8.4%	\$71,138.67	1.7%	\$19.59
5190	3395	7.8%	\$134,261.32	3.1%	\$39.55
6796	2443	5.6%	\$380,603.13	8.9%	\$155.79
6816	1870	4.3%	\$170,599.76	4.0%	\$91.23
5136	1720	4.0%	\$278,357.16	6.5%	\$161.84
6795	1265	2.9%	\$171,206.01	4.0%	\$135.34
6105	1148	2.6%	\$165,508.96	3.8%	\$144.17
6198	776	1.8%	\$102,106.31	2.4%	\$131.58
6805	609	1.4%	\$59,105.23	1.4%	\$97.05
6091	621	1.4%	\$69,194.93	1.6%	\$111.43
6154	594	1.4%	\$88,030.51	2.0%	\$148.20
6168	506	1.2%	\$98,116.91	2.3%	\$193.91
6107	313	0.7%	\$17,309.05	0.4%	\$55.30
5159	168	0.4%	\$11,686.72	0.3%	\$69.56
5199	104	0.2%	\$17,582.68	0.4%	\$169.06
6109	91	0.2%	\$4,406.91	0.1%	\$48.43
6160	21	0.0%	\$92,646.53	2.2%	\$4,411.74
5755	19	0.0%	\$4,366.44	0.1%	\$229.81
6096	8	0.0%	\$11,239.29	0.3%	\$1,404.91
=====					
TOTAL	43359	100.0%	\$4,301,615.22	100.0%	

ENCLOSURE (2)

DSSN SUMMARY OF TOTAL OVERPAID

DSSN	YTD COUNT	YTD TOTAL	%	YTD AMOUNT	YTD TOTAL	%
5136	224	5059	4.4%	\$278,357.16	\$4,301,615.22	6.5%
5190	307	5059	6.1%	\$134,261.32	\$4,301,615.22	3.1%
6092	806	5059	15.9%	\$548,511.18	\$4,301,615.22	12.8%
6167	382	5059	7.6%	\$423,458.67	\$4,301,615.22	9.8%
6187	1518	5059	30.0%	\$1,266,424.59	\$4,301,615.22	29.4%
6796	319	5059	6.3%	\$380,603.13	\$4,301,615.22	8.8%
	3556		70.3%	\$3,031,616.05		70.5%

DSSN SUMMARY OF EARLY OUTS

DSSN	YTD COUNT	YTD TOTAL	%	YTD AMOUNT	YTD TOTAL	%
5136	165	3322	5.0%	\$243,131.68	\$3,241,592.83	7.5%
5190	206	3322	6.2%	\$97,921.22	\$3,241,592.83	3.0%
6092	557	3322	16.8%	\$412,694.26	\$3,241,592.83	12.7%
6167	240	3322	7.2%	\$293,756.10	\$3,241,592.83	9.1%
6187	969	3322	29.2%	\$955,293.41	\$3,241,592.83	29.5%
6796	212	3322	6.4%	\$290,945.26	\$3,241,592.83	9.0%
	2349		70.7%	\$2,293,741.93		70.8%

DSSN SUMMARY OF RECEIVED AS OVERPAID

DSSN	YTD COUNT	YTD TOTAL	%	YTD AMOUNT	YTD TOTAL	%
5136	131	2501	5.2%	\$208,609.15	\$2,834,710.58	7.4%
5190	86	2501	3.4%	\$51,971.22	\$2,834,710.58	1.8%
6092	430	2501	17.2%	\$345,115.58	\$2,834,710.58	12.2%
6167	339	2501	13.6%	\$307,650.20	\$2,834,710.58	10.9%
6187	701	2501	28.0%	\$727,435.63	\$2,834,710.58	25.7%
6796	165	2501	6.6%	\$262,246.42	\$2,834,710.58	9.3%
	1852		74.1%	\$1,903,028.20		67.1%

ENCLOSURE (5)

COMPARISON OF OVERPAYMENTS IDENTIFIED BY D.O. TO ALL OVERPAYMENTS

	OVERPAID COUNT	D.O. IDENTIFIED OVERPAYMENT COUNT	IDENTIFIED BY D.O.	OVERPAID AMOUNT	D.O. IDENTIFIED OVERPAID AMOUNT	D.O. IDENTIFIED OVERPAID AMOUNT
FOR ALL RECORDS PROCESSED						
OCT 86	837	394	47.1%	\$432,446.16	\$280,008.19	64.7%
NOV 86	738	364	49.3%	\$435,849.48	\$288,158.20	66.1%
DEC 86	749	376	50.2%	\$501,084.62	\$350,153.07	69.9%
JAN 87	654	337	51.5%	\$429,127.21	\$283,993.43	66.2%
FEB 87	722	363	50.3%	\$422,286.92	\$244,586.91	57.9%
MAR 87	460	199	43.3%	\$343,525.47	\$198,541.86	57.8%
APR 87	627	334	53.3%	\$614,618.84	\$419,581.43	68.3%
MAY 87	427	240	56.2%	\$394,016.66	\$267,422.04	67.9%
JUN 87	359	183	51.0%	\$329,527.75	\$222,450.29	67.5%
JUL 87	388	208	53.6%	\$399,132.11	\$269,733.47	67.6%

FOR OVERPAYMENTS CAUSED BY PAYMENTS

OCT 86	272	115	42.3%	\$105,968.78	\$40,920.49	38.6%
NOV 86	255	112	43.9%	\$113,645.93	\$45,080.44	39.7%
DEC 86	226	104	46.0%	\$107,049.81	\$42,660.98	39.9%
JAN 87	215	93	43.3%	\$106,506.65	\$34,520.53	32.4%
FEB 87	242	91	37.6%	\$121,352.40	\$31,188.57	25.7%
MAR 87	218	96	44.0%	\$101,752.66	\$38,590.21	37.9%
APR 87	264	134	50.8%	\$149,928.88	\$57,568.44	38.4%
MAY 87	178	89	50.0%	\$97,122.89	\$51,998.26	53.5%
JUN 87	127	48	37.8%	\$55,290.89	\$23,791.80	43.0%
JUL 87	142	58	40.8%	\$77,510.09	\$31,303.03	40.4%

FOR OVERPAYMENTS CAUSED BY ALLOTMENTS

OCT 86	97	29	29.9%	\$26,696.66	\$7,568.31	28.3%
NOV 86	86	22	25.6%	\$24,929.22	\$6,737.42	27.0%
DEC 86	78	22	28.2%	\$23,284.19	\$6,755.11	29.0%
JAN 87	66	18	27.3%	\$20,365.57	\$5,581.94	27.4%
FEB 87	66	27	40.9%	\$18,258.69	\$3,939.42	21.6%
MAR 87	46	19	41.3%	\$13,251.10	\$5,842.26	44.1%
APR 87	63	27	42.9%	\$19,213.41	\$5,946.35	30.9%
MAY 87	42	19	45.2%	\$13,773.49	\$5,094.02	37.0%
JUN 87	34	14	41.2%	\$14,292.94	\$3,625.91	25.4%
JUL 87	42	14	33.3%	\$17,067.99	\$8,329.88	48.8%

FOR OVERPAYMENTS CAUSED BY EXCESS LEAVE

OCT 86	92	70	76.1%	\$28,596.93	\$23,110.23	80.8%
NOV 86	82	58	70.7%	\$29,633.55	\$22,310.00	75.3%
DEC 86	85	56	65.9%	\$36,138.25	\$25,278.92	70.0%
JAN 87	76	54	71.1%	\$38,071.39	\$27,553.49	72.4%
FEB 87	76	59	77.6%	\$30,898.92	\$25,769.60	83.4%
MAR 87	55	34	61.8%	\$18,077.40	\$12,518.44	69.2%
APR 87	90	63	70.0%	\$42,029.73	\$37,387.68	89.0%
MAY 87	70	50	71.4%	\$30,178.55	\$23,718.92	78.6%
JUN 87	69	47	68.1%	\$29,376.42	\$20,593.60	70.1%
JUL 87	70	53	75.7%	\$29,876.90	\$24,544.64	82.2%

FOR OVERPAYMENTS CAUSED BY RECOUNTS

OCT 86	65	56	86.2%	\$160,543.83	\$142,010.04	88.5%
NOV 86	51	43	84.3%	\$155,347.38	\$132,228.84	85.1%
DEC 86	76	67	88.2%	\$231,871.29	\$216,159.70	93.2%
JAN 87	56	46	82.1%	\$152,379.96	\$136,638.07	89.7%
FEB 87	61	49	80.3%	\$147,396.11	\$109,540.39	74.3%
MAR 87	46	38	82.6%	\$122,242.57	\$104,161.09	85.2%
APR 87	82	69	84.1%	\$257,399.97	\$226,747.41	88.1%
MAY 87	62	52	83.9%	\$156,994.10	\$120,773.97	76.9%
JUN 87	63	49	77.8%	\$154,656.94	\$123,054.54	79.6%
JUL 87	69	58	84.1%	\$177,412.30	\$142,362.41	80.2%

FOR OVERPAYMENTS CAUSED BY ADVANCE PAY

OCT 86	38	33	86.8%	\$25,280.01	\$22,898.28	90.6%
NOV 86	36	31	86.1%	\$23,470.64	\$21,646.54	92.2%
DEC 86	28	27	96.4%	\$21,459.64	\$20,847.64	97.1%
JAN 87	39	33	84.6%	\$32,203.20	\$28,712.96	89.2%
FEB 87	36	33	91.7%	\$21,533.85	\$20,261.21	94.1%
MAR 87	30	22	73.3%	\$18,112.01	\$13,617.70	75.2%
APR 87	59	51	86.4%	\$46,355.90	\$41,203.87	88.9%
MAY 87	41	40	97.6%	\$31,921.79	\$30,941.25	96.9%
JUN 87	29	27	93.1%	\$27,396.59	\$25,611.26	93.5%
JUL 87	27	24	88.9%	\$20,452.78	\$18,935.32	92.6%

NET CHANGE OF MMPA OUT-OF-BALANCE ACCOUNTS FOR MARINE CORPS
OVERPAYMENTS

GROUP/ MONTH/YEAR	DOLLAR VALUE	TTL ACCTS MTND	NO. OF O-O-B ACCTS	AVG \$ PER O-O-B ACCT	PER ACCT	ERROR RATE (%)	ACCURACY RATE (%)
MARINE CORPS AUG 87	(94,537)	-87	-4	\$9.89	0.00	0.00	0.00
CENTRALIZED AUG 87	\$293	-1116	1	(\$30.51)	0.00	0.00	0.00
DECENTRALIZED AUG 87	(94,830)	1029	-5	\$24.31	-0.01	0.01	0.01

NET CHANGE OF MMPA OUT-OF-BALANCE ACCOUNTS FOR MARINE CORPS
UNDERPAYMENTS

GROUP/ MONTH/YEAR	DOLLAR VALUE	TTL ACCTS MTND	NO. OF O-O-B ACCTS	AVG \$ PER O-O-B ACCT	PER ACCT	ERROR RATE (%)	ACCURACY RATE (%)
MARINE CORPS AUG 87	\$26,657	-87	4	\$160.18	0.00	0.00	0.00
CENTRALIZED AUG 87	(92,857)	-1116	0	(\$98.52)	0.00	0.00	0.00
DECENTRALIZED AUG 87	\$29,514	1029	4	\$266.90	0.00	0.00	0.00

NOTES: (1) The figures presented here represent the differences in value between the current month's category totals and those of the previous month. A positive number indicates a net increase in value. Conversely, a negative number indicates a net decrease in value.

(2) Dollar figures in parentheses indicate a net decrease in value.

(3) Accounts Maintained figures obtained from Mark IV data extracts.

(4) Training RLCS have been omitted from DSSNs 5153, 5190, 6187, and 6798; Platoon Leader Candidates (PLCs) and Basic Schools have been omitted from 6105; and students have been omitted from 6107.

(5) This month's Marine Corps Combined (Overpayments and Underpayments) Universe Error Rate (X) is .12%

(6) This month's Centralized Combined (Overpayments and Underpayments) Universe Error Rate (X) is .13%

(7) This month's Decentralized Combined (Overpayments and Underpayments) Universe Error Rate (X) is .12%

S OF MONTH OUT-OF-BALANCE ACCOUNTS BY DSSN AND MONTH
OVERPAYMENTS

SUMMARY OF MONTH OUT-OF-BALANCE ACCOUNTS BY DSSN AND MONTH
OVERPAYMENTS

DSSN/MONTH	DOLLAR VALUE	TTL ACTS	NO. OF 0-0-8 ACTS	AVG \$ PER 0-0-8 ACT	ERROR RATE(%)	ACCURACY RATE(%)	DSSN/MONTH	DOLLAR VALUE	TTL ACTS	NO. OF 0-0-8 ACTS	AVG \$ PER 0-0-8 ACT	ERROR RATE(%)	ACCURACY RATE(%)
5136 JUL 87	44,875	9946	0	1609.38	0.00	99.92	6154 JUL 87	40	3259	0	ERR	0.00	100.00
AUG	44,359	9946	0	1544.86	0.00	99.92	AUG	9924	3227	1	9924.00	0.03	99.97
SEP				ERR	ERR	ERR	SEP				ERR	ERR	ERR
OCT				ERR	ERR	ERR	OCT				ERR	ERR	ERR
NOV				ERR	ERR	ERR	NOV				ERR	ERR	ERR
DEC				ERR	ERR	ERR	DEC				ERR	ERR	ERR
JAN 88				ERR	ERR	ERR	JAN 88				ERR	ERR	ERR
FEB				ERR	ERR	ERR	FEB				ERR	ERR	ERR
MAR				ERR	ERR	ERR	MAR				ERR	ERR	ERR
APR				ERR	ERR	ERR	APR				ERR	ERR	ERR
MAY				ERR	ERR	ERR	MAY				ERR	ERR	ERR
JUN				ERR	ERR	ERR	JUN				ERR	ERR	ERR
5153 JUL 87	40	2572	0	ERR	0.00	100.00	6160 JUL 87	43,738	29943	3	11,246.00	0.01	99.99
AUG	40	2397	0	ERR	0.00	100.00	AUG	44,061	20088	2	12,030.50	0.01	99.99
SEP				ERR	ERR	ERR	SEP				ERR	ERR	ERR
OCT				ERR	ERR	ERR	OCT				ERR	ERR	ERR
NOV				ERR	ERR	ERR	NOV				ERR	ERR	ERR
DEC				ERR	ERR	ERR	DEC				ERR	ERR	ERR
JAN 88				ERR	ERR	ERR	JAN 88				ERR	ERR	ERR
FEB				ERR	ERR	ERR	FEB				ERR	ERR	ERR
MAR				ERR	ERR	ERR	MAR				ERR	ERR	ERR
APR				ERR	ERR	ERR	APR				ERR	ERR	ERR
MAY				ERR	ERR	ERR	MAY				ERR	ERR	ERR
JUN				ERR	ERR	ERR	JUN				ERR	ERR	ERR
5159 JUL 87	40	1148	0	ERR	0.00	100.00	6167 JUL 87	461,064	25115	35	11,744.69	0.14	99.86
AUG	40	1122	0	ERR	0.00	100.00	AUG	463,517	24912	37	11,716.68	0.15	99.85
SEP				ERR	ERR	ERR	SEP				ERR	ERR	ERR
OCT				ERR	ERR	ERR	OCT				ERR	ERR	ERR
NOV				ERR	ERR	ERR	NOV				ERR	ERR	ERR
DEC				ERR	ERR	ERR	DEC				ERR	ERR	ERR
JAN 88				ERR	ERR	ERR	JAN 88				ERR	ERR	ERR
FEB				ERR	ERR	ERR	FEB				ERR	ERR	ERR
MAR				ERR	ERR	ERR	MAR				ERR	ERR	ERR
APR				ERR	ERR	ERR	APR				ERR	ERR	ERR
MAY				ERR	ERR	ERR	MAY				ERR	ERR	ERR
JUN				ERR	ERR	ERR	JUN				ERR	ERR	ERR

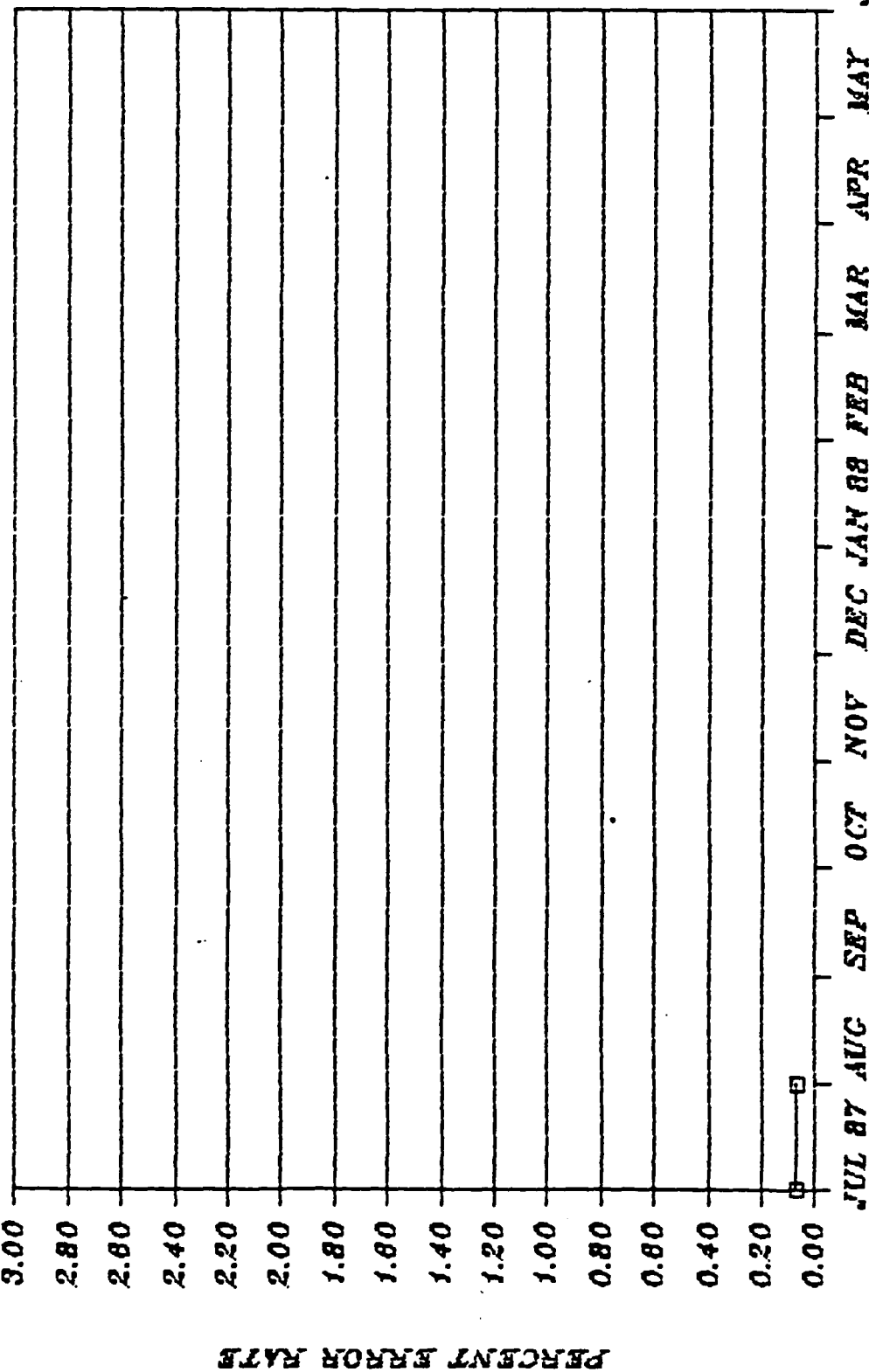
**SUMMARY OF MMPA OUT-OF-BALANCE COUNTS FOR MARINE CORPS
OVERPAYMENTS**

GROUP/ MONTH/YEAR	DOLLAR VALUE	TTL ACCTS MTND	NO. OF O-O-B ACCTS	AVG \$ PER O-O-B ACCT	ERROR RATE (%)	ACCURACY RATE (%)
M JUL 87	\$187,932	190,075	130	\$1,445.63	0.07	99.93
A AUG	\$183,395	189,988	126	\$1,455.52	0.07	99.93
R SEP	\$0	0	0	ERR	ERR	ERR
I OCT	\$0	0	0	ERR	ERR	ERR
N NOV	\$0	0	0	ERR	ERR	ERR
E DEC	\$0	0	0	ERR	ERR	ERR
JAN 88	\$0	0	0	ERR	ERR	ERR
C FEB	\$0	0	0	ERR	ERR	ERR
O MAR	\$0	0	0	ERR	ERR	ERR
R APR	\$0	0	0	ERR	ERR	ERR
P MAY	\$0	0	0	ERR	ERR	ERR
S JUN	\$0	0	0	ERR	ERR	ERR
C JUL 87	\$67,413	55,755	42	\$1,605.07	0.08	99.92
E AUG	\$67,706	54,639	43	\$1,574.56	0.08	99.92
N SEP	\$0	0	0	ERR	ERR	ERR
T OCT	\$0	0	0	ERR	ERR	ERR
R NOV	\$0	0	0	ERR	ERR	ERR
A DEC	\$0	0	0	ERR	ERR	ERR
L JAN 88	\$0	0	0	ERR	ERR	ERR
I FEB	\$0	0	0	ERR	ERR	ERR
Z MAR	\$0	0	0	ERR	ERR	ERR
E APR	\$0	0	0	ERR	ERR	ERR
D MAY	\$0	0	0	ERR	ERR	ERR
JUN	\$0	0	0	ERR	ERR	ERR
D JUL 87	\$120,519	134,320	88	\$1,369.53	0.07	99.93
E AUG	\$115,689	135,349	83	\$1,393.84	0.06	99.94
C SEP	\$0	0	0	ERR	ERR	ERR
E OCT	\$0	0	0	ERR	ERR	ERR
N NOV	\$0	0	0	ERR	ERR	ERR
T DEC	\$0	0	0	ERR	ERR	ERR
R JAN 88	\$0	0	0	ERR	ERR	ERR
A FEB	\$0	0	0	ERR	ERR	ERR
L MAR	\$0	0	0	ERR	ERR	ERR
I APR	\$0	0	0	ERR	ERR	ERR
Z MAY	\$0	0	0	ERR	ERR	ERR
E JUN	\$0	0	0	ERR	ERR	ERR

(5)

MARINE CORPS MMPA OUT-OF-BAL ACCTS

PCT UNVERSE ERROR RATE: OVERPYMTS



JULY 1987 - JUNE 1988

S.D. : MARR OUT-OF-BALANCE ACCOUNTS BY DSSN AND MONTH
UNDERPAYMENTS

SUMMARY OF MARR OUT-OF-BALANCE ACCOUNTS BY DSSN AND MONTH
UNDERPAYMENTS

DSSN/MONTH	DOLLAR VALUE	TTL ACCTS MTNO	NL. OF O-O-B ACCTS	AVG \$ PER O-O-B ACCT	ERROR RATE (%)	ACCURACY RATE (%)	DSSN/MONTH	DOLLAR VALUE	TTL ACCTS MTNO	NL. OF O-O-B ACCTS	AVG \$ PER O-O-B ACCT	ERROR RATE (%)	ACCURACY RATE (%)
5136 JUL 87	0	9946	0	ERR	0.00	100.00	6154 JUL 87	0	3259	0	ERR	0.00	100.00
AUG	4499	9848	1	\$499.00	0.01	99.99	AUG	97,150	3227	1	\$7,150.00	0.03	99.97
SEP				ERR	ERR	ERR	SEP				ERR	ERR	ERR
OCT				ERR	ERR	ERR	OCT				ERR	ERR	ERR
NOV				ERR	ERR	ERR	NOV				ERR	ERR	ERR
DEC				ERR	ERR	ERR	DEC				ERR	ERR	ERR
JAN 88				ERR	ERR	ERR	JAN 88				ERR	ERR	ERR
FEB				ERR	ERR	ERR	FEB				ERR	ERR	ERR
MAR				ERR	ERR	ERR	MAR				ERR	ERR	ERR
APR				ERR	ERR	ERR	APR				ERR	ERR	ERR
MAY				ERR	ERR	ERR	MAY				ERR	ERR	ERR
JUN				ERR	ERR	ERR	JUN				ERR	ERR	ERR

5153 JUL 87	0	2572	0	ERR	0.00	100.00	6160 JUL 87	4017	20903	3	\$1,339.00	0.01	99.99
AUG	90	2397	0	ERR	0.00	100.00	AUG	\$20,707	20008	4	\$5,176.75	0.02	99.98
SEP				ERR	ERR	ERR	SEP				ERR	ERR	ERR
OCT				ERR	ERR	ERR	OCT				ERR	ERR	ERR
NOV				ERR	ERR	ERR	NOV				ERR	ERR	ERR
DEC				ERR	ERR	ERR	DEC				ERR	ERR	ERR
JAN 88				ERR	ERR	ERR	JAN 88				ERR	ERR	ERR
FEB				ERR	ERR	ERR	FEB				ERR	ERR	ERR
MAR				ERR	ERR	ERR	MAR				ERR	ERR	ERR
APR				ERR	ERR	ERR	APR				ERR	ERR	ERR
MAY				ERR	ERR	ERR	MAY				ERR	ERR	ERR
JUN				ERR	ERR	ERR	JUN				ERR	ERR	ERR

5159 JUL 87	0	1148	0	ERR	0.00	100.00	6167 JUL 87	67192	25115	17	\$1,952.47	0.07	99.93
AUG	90	1122	0	ERR	0.00	100.00	AUG	\$56,856	24912	17	\$3,344.47	0.07	99.93
SEP				ERR	ERR	ERR	SEP				ERR	ERR	ERR
OCT				ERR	ERR	ERR	OCT				ERR	ERR	ERR
NOV				ERR	ERR	ERR	NOV				ERR	ERR	ERR
DEC				ERR	ERR	ERR	DEC				ERR	ERR	ERR
JAN 88				ERR	ERR	ERR	JAN 88				ERR	ERR	ERR
FEB				ERR	ERR	ERR	FEB				ERR	ERR	ERR
MAR				ERR	ERR	ERR	MAR				ERR	ERR	ERR
APR				ERR	ERR	ERR	APR				ERR	ERR	ERR
MAY				ERR	ERR	ERR	MAY				ERR	ERR	ERR
JUN				ERR	ERR	ERR	JUN				ERR	ERR	ERR

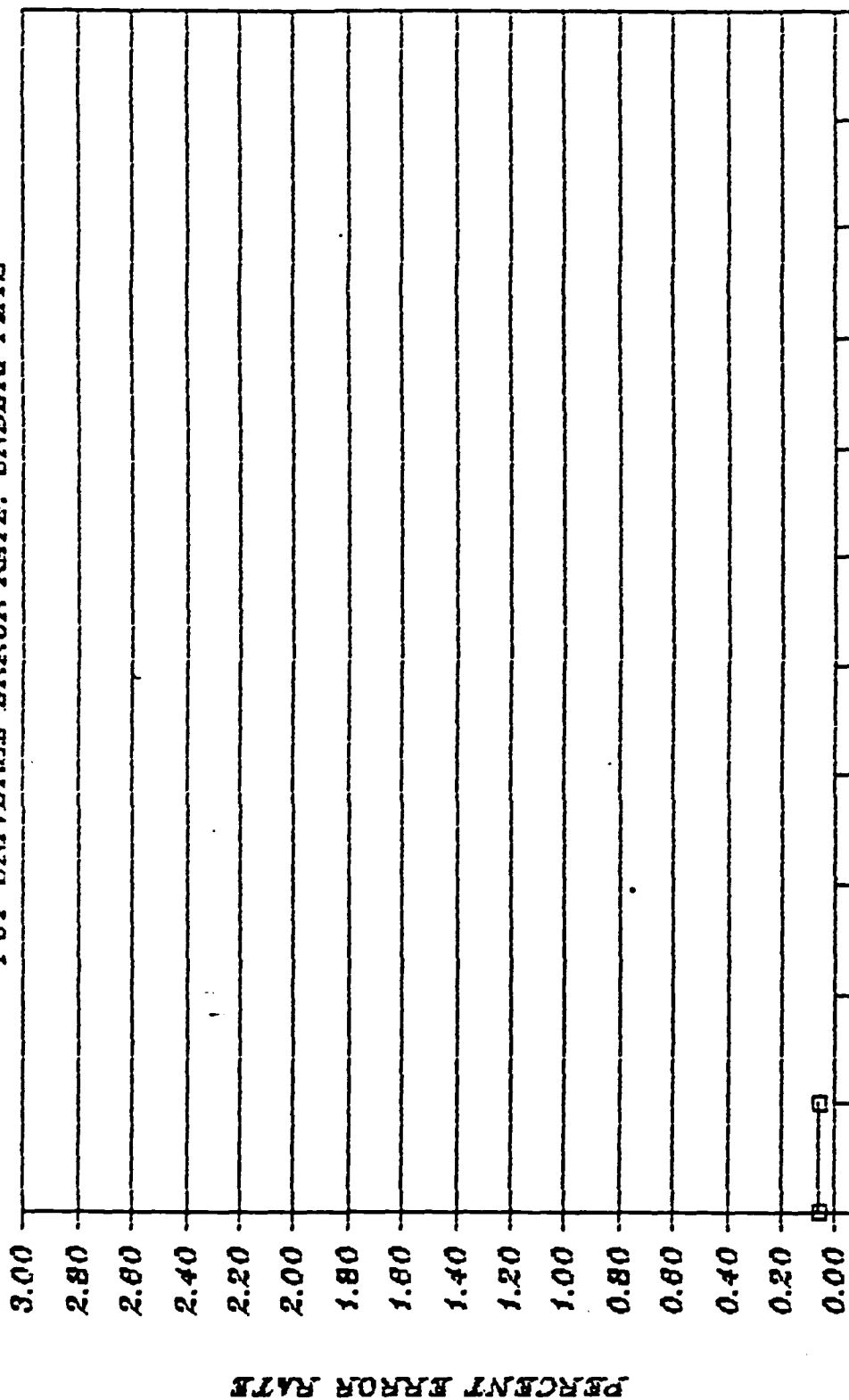
SUMMARY OF MPA OUT-OF-BALANCE COUNTS FOR MARINE CORPS
UNDERPHMENTS

GROUP/ MONTH/YEAR	DOLLAR VALUE	TTL ACCTS MTND	NO. OF 0-0-B ACCTS	AVG \$ PER 0-0-B ACCT	ERROR RATE (%)	ACCURACY RATE (%)
M JUL 87	\$237,469	190,075	107	\$2,219.34	0.06	99.94
A AUG	\$264,126	189,988	111	\$2,379.51	0.06	99.94
R SEP	\$0	0	0	ERR	ERR	ERR
I OCT	\$0	0	0	ERR	ERR	ERR
N NOV	\$0	0	0	ERR	ERR	ERR
E DEC	\$0	0	0	ERR	ERR	ERR
JAN 88	\$0	0	0	ERR	ERR	ERR
C FEB	\$0	0	0	ERR	ERR	ERR
O MAR	\$0	0	0	ERR	ERR	ERR
R APR	\$0	0	0	ERR	ERR	ERR
P MAY	\$0	0	0	ERR	ERR	ERR
S JUN	\$0	0	0	ERR	ERR	ERR
C JUL 87	\$88,724	55,755	29	\$3,059.45	0.05	99.95
E AUG	\$85,867	54,639	29	\$2,960.93	0.05	99.95
N SEP	\$0	0	0	ERR	ERR	ERR
T OCT	\$0	0	0	ERR	ERR	ERR
R NOV	\$0	0	0	ERR	ERR	ERR
A DEC	\$0	0	0	ERR	ERR	ERR
L JAN 88	\$0	0	0	ERR	ERR	ERR
I FEB	\$0	0	0	ERR	ERR	ERR
Z MAR	\$0	0	0	ERR	ERR	ERR
E APR	\$0	0	0	ERR	ERR	ERR
D MAY	\$0	0	0	ERR	ERR	ERR
JUN	\$0	0	0	ERR	ERR	ERR
D JUL 87	\$148,745	134,320	78	\$1,906.99	0.06	99.94
E AUG	\$178,259	135,349	82	\$2,173.89	0.06	99.94
C SEP	\$0	0	0	ERR	ERR	ERR
E OCT	\$0	0	0	ERR	ERR	ERR
N NOV	\$0	0	0	ERR	ERR	ERR
T DEC	\$0	0	0	ERR	ERR	ERR
R JAN 88	\$0	0	0	ERR	ERR	ERR
A FEB	\$0	0	0	ERR	ERR	ERR
L MAR	\$0	0	0	ERR	ERR	ERR
I APR	\$0	0	0	ERR	ERR	ERR
Z MAY	\$0	0	0	ERR	ERR	ERR
E JUN	\$0	0	0	ERR	ERR	ERR
D						

(5)

MARINE CORPS MMPA OUT-OF-BAL ACCTS

PCT UNIVERSE ERROR RATE: UNDERPYMTS



JUL 87 AUG SEP OCT NOV DEC JAN 88 FEB MAR APR MAY JUN

JULY 1987 - JUNE 1988

**DISTRIBUTION OF MMPA OUT-OF-BALANCE ACCOUNTS WITHIN SPECIFIED DOLLAR VALUE INTERVALS
(UNADJUSTED MARINE CORPS TOTALS FOR AUGUST 1987)**

DOLLAR VALUE INTERVALS	OVERPAYMENTS				UNDERPAYMENTS				TOTAL			
	NO.	%	CUM. NO.	CUM. %	NO.	%	CUM. NO.	CUM. %	NO.	%	CUM. NO.	CUM. %
50 to 99	70	8.29	70	8.29	85	8.37	85	8.37	155	8.34	155	8.34
100 to 199	106	12.56	176	20.85	98	9.66	183	18.03	204	10.97	359	19.31
200 to 299	88	10.43	264	31.28	122	12.02	305	30.05	210	11.30	569	30.61
300 to 399	76	9.09	340	40.28	99	9.75	404	39.80	175	9.41	744	40.02
400 to 499	79	9.36	419	49.64	82	8.08	486	47.88	161	8.66	905	48.68
500 to 999	222	26.30	641	75.95	240	23.65	726	71.53	462	24.85	1367	73.53
1000 plus	203	24.05	844	100.00	289	28.47	1015	100.00	492	26.47	1859	100.00
MEDIAN DOLLAR VALUE		\$501.34				\$508.87					\$505.25	

NOTE: The above analysis includes all MMPA accounts in an out-of-balance status for 90 days or more of value greater than or equal to \$50.



APPENDIX J

UNITED STATES MARINE CORPS

MARINE CORPS FINANCE CENTER
KANSAS CITY, MISSOURI 64197

IN REPLY REFER TO:
7220
QAS

22 SEP 1987


From: Commanding Officer
To: Commandant of the Marine Corps (FDF)

Subj: RESULTS FROM LES SAMPLE AUDIT (JUNE 1987)

REF: (A) ALMAR 158/86

Encl: (1) Statistical results with listing of system errors from
June's audit of sampled May LES's
(2) Automated Pay Systems comments

1. This report summarizes results from June's disbursing office audit of May's sampled LES's (per the reference).
2. June's system error rate (.15%) is significantly less than May's (.56%). We estimate from this month's sample system error percentage a 95 percent probability that between .07 percent and .23 percent of all accounts in June contain system deficiencies.
3. Relationships among system, CO and DO type error rates in June are as follows: (1) CO (3.25%) and DO (1.58%) type error rates significantly exceed the system error percentage; (2) CO type errors significantly exceed DO type errors; and (3) changes in CO and DO type error rates between monthly audits are insignificant.
4. Enclosure (1) lists types of system errors reported by disbursing officers in June. Errors involving Leave Balance and Travel Rations are the most frequently occurring types of system deficiencies reported by disbursers in this month's sample audit. Enclosure (2) provides comments concerning reported system errors from our Directorate of Automated Pay Systems.
5. Refer questions or comments concerning this report to our Directorate of Automated Pay Systems or to the Statistical Analysis Office.


A. G. EMERY
By direction

[illegible]

	DESM 6492		DESM 6496		DESM 6185		DESM 6107		DESM 6199		DESM 6154		DESM 6168	
	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT
ACCOUNTS EXAMINED	1823		133		384		123		63		163		631	
ACCOUNTS W/SYSTEM ERRORS	4	0.33%	0	0.00%	0	0.00%	2	1.63%	0	0.00%	0	0.00%	4	0.40%
ACCOUNTS W/"OTHER" ERRORS														
"NO TYPE" ERRORS	50	4.89%	1	0.74%	2	0.53%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
"CD TYPE" ERRORS	66	6.43%	1	0.74%	12	3.90%	0	0.00%	0	0.00%	2	1.21%	0	0.00%
TOTAL "OTHER" ERRORS	116	11.24%	2	1.48%	14	4.53%	0	0.00%	0	0.00%	2	1.21%	0	0.00%
TOTAL ACCOUNTS WITH ERRORS	180	11.73%	2	1.48%	14	4.53%	2	1.63%	0	0.00%	2	1.21%	4	0.44%

RESULTS FROM JUNE'S ABIL DE JUNE'S SAMPLES 1534

	DSN 6167	DSN 6168	DSN 6167	DSN 6198	DSN 6795	DSN 6796	DSN 6798
	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT	SAMPLE
ACCOUNTS EXAMINED	1131		169	277	393	535	127
ACCOUNTS W/SYSTEM ERRORS	2	0.17%	0	0.00%	0	0.19%	0
ACCOUNTS W/"OTHER" ERRORS							
"NO TYPE" ERRORS	4	0.35%	0	0.00%	19	4.43%	2
"CD TYPE" ERRORS	10	0.87%	0	0.00%	16	4.07%	3
TOTAL "OTHER" ERRORS	14	1.22%	0	0.00%	35	8.50%	5
TOTAL ACCOUNTS WITH ERRORS	16	1.39%	0	0.00%	54	12.93%	7

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(2)

	DSN 6403	DSN 6415	DSN 6415	DSN 6415	DSN 6415	DSN 6415	DSN 6415
	SAMPLE	PCT	SAMPLE	PCT	SAMPLE	PCT	SAMPLE
ACCOUNTS EXAMINED	127		329	0.47%	0.47%		
ACCOUNTS W/SYSTEM ERRORS	0	0.00%	0	0.00%	13	0.15%	
ACCOUNTS W/"OTHER" ERRORS							
"NO TYPE" ERRORS	0	0.00%	1	0.28%	134	1.58%	
"CD TYPE" ERRORS	0	0.00%	14	3.96%	275	3.25%	
TOTAL "OTHER" ERRORS	0	0.00%	15	4.18%	409	4.77%	
TOTAL ACCOUNTS WITH ERRORS	0	0.00%	15	4.18%	417	4.92%	

TYPES OF SYSTEM ERRORS FOUND IN JUNE'S AUDIT OF MAY'S SAMPLED LESs

CASE NO	DESN	NUMBER	SNO/DTG MSG	SSN	REASON
1	6092	1	590 23-87	494628799	JVL RMTS; Failure to correct/adjust after PCS posting
2	6107	2	2183547Aug87	259475333	(Lv Bal); Inaccurate/Non-accrual
3	6160	2	Unspecified	508702998	Lv Bal; on accrual on C of 8 reeml.
4	6164	2	Unspecified	008369153	OWI; 870516 rate inc failed to update initial/terminal occupancy allow.
5	6167	2	Unspecified	546437816	ETC
6	6796	1	Unspecified	270271778	Lv Bal; Non-accr for UA period; failed to make proper ded when spanning 2 mos.

(3)

2. The following information is provided in response to the reference relative to the disbursing audit of May 1987 LES's.

a. Case #1: Problem identified by SAO 23-87. Listings of Marines affected are provided to the disbursing officer each month for corrective action.

b. Cases #2 and 6: Problems previously identified. Due to the small population involved and complex changes required to resolve the problems, corrective action has been deferred and will be completed in a future project involving the leave accounting system.

c. Case #3: Unable to research due to age of problem. Problem occurred during December 1986 and master records before/after December 1986 U&E are not available. We will do research for a current problem of similar nature.

d. Case #4: Problem corrected with July 1987 end of month U&E. OHA updated for Marines affected.

e. Case #5: Suspected problem researched. We could not identify any problems with the Marines ECC.



APPENDIX K
UNITED STATES MARINE CORPS
MARINE CORPS FINANCE CENTER
KANSAS CITY, MISSOURI 64197-0001

IN REPLY REFER TO:

7202/1
DAPS-4
22 Jul 87

From: Commanding Officer

Subj: SYSTEM ASSURANCE OFFICER (SAO QUARTERLY STATUS REPORT) -
JUMPS/MMS DEFICIENCIES

Ref: (a) MCO 7220.44

Encl: (1) Quarterly Systems Deficiencies Report Jun 87

1. The reference provides policy and procedures for payment of Marines under JUMPS/MMS and designates the Commanding Officer, Marine Corps Finance Center, as the Systems Assurance Officer for the Marine Corps.
2. The enclosure is a report of system deficiencies for the quarter ending 30 June 1987.

S. E. TURNER
By direction

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REAL FAMMIS

1. The following system deficiencies were carried forward from the March 1987 System Deficiency Report. The status of each problem is listed.

a. Allotments. U&E COMPUTE ROUTINE (TTC U04) failed to reflect credit for previously deducted amounts for tri-annual bond allotments when the retroactive stop allotment transaction processed after date of discharge. Problem was noted 26 November 1986 and has been resolved.

b. Basic Allowance for Quarters (BAQ). JOIN ENTRY (TTC 020) erroneously generated an overlapping credit of partial BAQ when Marines' dates of detachment and join were identical. Problem was noted 23 October 1986 and is scheduled for correction in Test Cycle 2-87.

c. Basic Pay

(1) GENERAL PROMOTION/REDUCTION ROUTINE (TTC G21) generated base pay at an incorrect rate for transactions processed retroactively with an effective date (ED) in 1986. Problem was noted 10 February 1987 and is scheduled for correction in a future test cycle.

(2) GENERAL PROMOTION/REDUCTION ROUTINE (TTC G21) generated deduction of base pay at an incorrect rate. Problem was noted 20 February 1987 and remains unresolved. (Refer to SAO 12-87 and 24-87).

(3) U&E UPDATE ROUTINE (TTC U03) failed to update the prime base pay remark with the new rate effective 870101. Problem was noted 5 March 1987 and remains unresolved.

(4) GENERAL PROMOTION/REDUCTION ROUTINE (TTC G21) executed from REDUCTION (TTC 056) failed to properly adjust the base pay remark. Problem was noted 9 March 1987 and is scheduled for correction in a future test cycle.

(5) DROP FROM ACTIVE SERVICE (TTC 378) generated credits of base pay at an incorrect amount for 31 December 1986 for member with less than 30 days service. Problem was noted 10 March 1987 and remains unresolved.

d. Basic Educational Assistance Program (BEAP)

(1) The BEAP PARTICIPATION REPORT (TTC MC9) failed to display the number of enlisted member's enrolled in BEAP for the current month. Problem was noted 6 January 1987 and is scheduled for correction in a future test cycle.

(2) The BEAP Participants Purged to History Report generated from U&E LOAD PROCESS (TTC FGA) failed to accumulate total records purged and accumulated deductions. Problem was noted 26 March 1987 and was corrected 5 May 1987.

e. Career Sea Pay (CARSEA)

(1) PROMOTION (TTC 052) failed to start career sea duty pay on the effective date of promotion. Problem was noted 12 March 1987 and remains unresolved.

Encl (1)

(2) CREDIT CARSEA DU FOR 30 DAYS OR LESS (TTC 147) generated credit of career sea pay at an incorrect rate and failed to update the total sea service record. Problem was noted 18 March 1987 and is scheduled for correction in Test Cycle 1-88. (Refer to SAO 29-87).

f. Clothing Replacement Allowance (CRA). DROP FROM ACTIVE SERVICE (TTC 389) executed through GENERAL DROP (TTC G09) failed to post the drop date to the CRA remark TO DATE. Problem was noted 12 January 1987 and was corrected 27 January 1987.

g. Delayed Checkage. SUSPEND LIQ OF INDEBTEDNESS (TTC 560) delete/add entry generated an incorrect as of balance in the indebtedness remark (928) and the credit remark (926). Problem was noted 12 December 1986 and is scheduled for correction in a future test cycle.

h. Enlistment Bonus. CORRECTION ENTRY FOR ENLISTMENT BONUS (TTC 547) failed to change the compute flag of an existing remark when a new remark was built from the existing remark. Problem was noted 4 November 1985 and is scheduled for correction in a future test cycle.

i. Expiration of Current Contract (ECC). ECC date forecasted incorrect amount for member whose ECC expired prior to end-of-month payday. Member's ECC date was 24 February 1985. Problem was noted 4 March 1985 and has been resolved.

j. Foreign Duty Pay (FORDU). CREDIT SEA or FOREIGN DUTY (TTC 125) delete/add generated an erroneous amount in the 913 remark. Problem was noted 11 August 1986 and was corrected 14 January 1987.

k. Forfeiture of Pay/Court Martial.

(1) FORFEITURE OF PAY (TTC 283) erroneously generated deduction during a period of non-pay status and commenced deduction for a second NJP prior to completion of deduction of the first NJP. Problem was noted 19 July 1985 and is scheduled for correction in a future test cycle.

(2) FORFEITURE OF PAY (TTC 283) deducted an incorrect amount for the second forfeiture when a member was awarded concurrent NJP's. Problem was noted 3 January 1986 and remains unresolved.

l. Housing. CREDIT ADVANCE HOUSING SECURITY DEPOSIT (TTC 608) failed with an incorrect format and edit error code. Problem was noted 10 February 1987 and was corrected 20 April 1987.

m. Leave

(1) Problem was noted where excess leave was not accounted for when time lost had been reported. Problem was noted 3 August 1984 and will be corrected in the leave accounting redesign project. (Refer to SAO 37-84)

(2) Processing of REENLISTMENT (TTC 004) or ENLISTMENT EXTENSION (TTC 117) is improperly reducing leave balance to zero instead of carrying leave balance forward. Problem is sporadic and continues to be reviewed and tested for identification and resolution when cases can be detected.

(3) U&E COMPUTE ROUTINE (TTC U04) executed from EXTENSION ENLISTMENT EFFECTIVE (TTC 117) failed to carry positive leave balances forward to the new contract for member's discharged for immediate reenlistment. Problem was noted 20 November 1986 and has been resolved.

(4) CHECK TAD LEAVE (TTC 521) delete/add and delete as erroneous does not post the day prior to the first day of excess leave to the TO DATE causing the transaction to fail with a "W" error. Problem was noted 11 February 1987 and is scheduled for correction in a future test cycle.

(5) SPECIAL PMT FOR LST (TTC 642) failed to adjust the prime leave remark for member who settled all leave prior to discharge for immediate reenlistment. Problem was noted 11 March 1987 and has been resolved.

n. Liquidation of Indebtedness.

(1) PAY STATUS TABLE (TTC U130) erroneously computed on and adjusted an inactive liquidation of indebtedness remark when a leave period was processed retroactively. Problem was noted 15 January 1987 and has been resolved.

(2) U&E COMPUTE ROUTING (TTC U04) executed from CHECK LIQ OF INDEBTEDNESS (TTC 559) erroneously adjusted a 928 remark that was stopped without payment. Problem was noted 30 March 1987 and was corrected 13 May 1987.

o. Lump Sum Leave (LSL)

(1) SPECIAL PMT FOR LSL (TTC 642) processed and failed to build a career LSL remark (947) for members in a separated status. Problem was noted 23 August 1984 and will be corrected in the leave accounting redesign project.

(2) SPECIAL PMT FOR LSL (TTC 642) with an effective date (ED) of 1 May 1984 processed prior to the end-of-month April 1984 U&E executed 5 May 1984. U&E May 1984 should not have considered a TTC with ED of 1 May 1984. Problem was noted 17 September 1984 and will be corrected in the leave accounting redesign project.

p. Payments and Payrolls. TTC U150 (U&E LEAVE MODULE) is erroneously overlaying instead of updating the saved leave remarks (952) causing TTC 642 (SPECIAL PMT FOR LSL) to fail with an "L" error. Problem was noted 15 December 1986 and remains unresolved.

q. Period of Service (POS). FILE BUILD (TTC G23) executed from CAMS ACCEPT APPOINTMENT (TTC 054) failed to properly compute period of service. Problem was noted 17 March 1987 and remains unresolved.

r. Permanent Change of Station (PCS). PCS LAPSED TIME (TTC 520) erroneously failed a delete/add transaction for member who completed four months of active during the period of PCS. Problem was noted 26 February 1987 and was corrected 22 March 1987.

s. State Income Tax Withholding (SITW). U&E TAX MODULE (TTC UAC) generated erroneous SITW and state YTD wages on the January LES's for members discharged in December 1986. Problem was noted 11 February 1987 and remains unresolved.

t. Temporary Lodging Allowance (TLA). CHECK TLA (TTC 584) delete/add fails to properly compute first and last days of TLA credit when the total amount is not divisible by the number of days deleted. Problem was noted 19 February 1987 and remains unresolved.

u. Variable Housing Allowance (VHA)

(1) U&E UPDATE ROUTINE (TTC U03) fails to correctly terminate Intrim VHA rate when the suspense date and processing date are the same. Problem was noted 18 March 1987 and was corrected 5 April 1987.

(2) CHAN BAQ (TTC 187) incorrectly computed VHA when a BAQ change was reported retroactively. Problem was noted 27 March 1987 and was corrected 6 April 1987.

v. Update and Extract (U&E). MGMT RPTS ACTIVITY TABLE (TTC ACT) posted incorrect activity numbers to management reports. Problem was noted 20 March 1987 and was corrected 5 May 1987.

2. The following deficiencies have been identified since 31 March 1987. The status of each problem is listed.

(a) Basic Allowance for Subsistence

(1) DOPMA TDY RATIONS (TTC 146) erroneously generated future dated subsistence remarks (916). Problem was noted 13 April 1987 and is unresolved.

(2) PCS LAPSED TIME (TTC 520) generated an incorrect deduction of rations for member whose dates of detachment and join were the same. Problem was noted 25 June and is unresolved.

(3) Processing of TTC J765 (E0-E2 Utility) erroneously deducted DOPMA rations for member when a reduction from E3 to E2 was processed retroactively. Problem was noted 28 May 1987 and is unresolved.

(b) Basic Pay

(1) GENERAL PROMOTION REDUCTION ROUTINE (TTC G21) failed to consider period of service date when member's promotion was reported retroactively and generated base pay at an incorrect rate. Problem was noted 22 April 1987 and was corrected 1 June 1987.

(2) U&E LES VAS EXTRACT ROUTINE (TTC U05) displayed an incorrect LES message for members who were confined beyond their ECC. Pay and Allowances continued to accrue while member was confined. Problem was noted 1 June 1987 and is unresolved.

(3) GENERAL DROP (TTC G09) erroneously computed base pay for separated members when the period of service computation did not agree with the years of service remark (703). Problem was noted 16 June 1987 and is unresolved.

c. Basic Educational Assistance Program (BEAP). A problem was identified where a delete BEAP transaction was reported but failed to process because the amount exceeded \$999.99. Problem was noted 2 April 1987 and was corrected 5 April 1987.

d. Career Sea Duty Pay (CARSEA)

(1) CRED CARSEA 30 DAYS OR LESS (TTC 147) erroneously failed with an "L" error and generated an invalid "L" advisory message. Problem was noted 8 April 1987 and was corrected 17 April 1987.

(2) CRED CARSEA 30 DAYS OR LESS (TTC 147) generated invalid CARSEA PAY and HISTORY remarks when the effective date (ED) of assignment was later than the ED of termination that was reported. Problem was noted 2 June 1987 and is unresolved.

e. Cost of Living Allowance (COLA). GENERAL PROMOTION/REDUCTION ROUTINE (TTC G21) properly changed the COLA index to zero but failed to generate a remark with zero amounts as the test cycle project was designed to do. Problem was noted 22 May 1987 and is unresolved.

f. Delayed Checkage.

(1) CHECK OF PAY AND ALLOW ADJUST (MCFC INPUT) (TTC 693) erroneously failed as a duplicate payment. Problem was noted 30 April 1987 and was corrected 1 May 1987. (Refer to SAO 36-87)

(2) The LES message displayed reflected erroneous dates for deductions of the delayed checkage. Problem was noted 11 May 1987 and was corrected 20 May 1987.

g. Disability Severance Pay. PAY CODE/TAX CODE TABLE FOR F&E (TTC G29) failed reflect the proper tax code for disability severance pay. Problem was noted 22 June 1987 and is unresolved.

h. Dishonored Checks. Processing of DISHONORED CK DED (TTC 695) established an incorrect 941 remark. Problem was noted 24 April 1987 and was corrected 30 April 1987.

i. Enlistment Bonus. CHECKAGE OF COMBAT ARMS ENL BONUS (TTC 546) failed to post the effective date to the date of recoupment in the remark (902) and TTC U04 (U&E COMPUTE ROUTINE) failed to change the recoupment compute flag. Problem was noted 10 June 1987 and is unresolved.

j. Extension Bonus. START OVERSEAS EXT BONUS (TTC 577) erroneously failed the on-line input transactions with a "Z" error, but the transaction appeared on the System Exception Report. Problem was noted 9 April 1987 and was corrected 6 May 1987.

k. Leave. Half Day Excess Leave Action Report for 5 May 1987 erroneously reflected reversal of the present RUC and DSSN in the report headers. Problem was noted 7 May 1987 and was corrected 20 May 1987.

l. Payments and Payrolls

(1) SPECIAL PMT FOR ADV PAY (TTC 634) erroneously generated a credit remark (926) and repayment remark (928) reflecting the pay code for advance Overseas Housing Allowance. Problem was noted 12 May 1987 and was corrected 15 May 1987. (Refer to SAO 38-87).

(2) SPECIAL PAYMENT FOR ADV OHA, BAQ (TTC 640) erroneously posts the advance payment date to the suspense date of the repayment remark. Repayment of these advances cannot be suspended. Problem was noted 12 May 1987 and was corrected 22 May 1987.

(3) CREDIT/CASH DEPOSIT (TTC 504) for monies returned from financial institutions generated credit remarks (926) with an incorrect payday. Problem was noted 19 May 1987 and was corrected 27 May 1987.

(4) CREDIT/CASH DEPOSIT (TTC 504) generated an incorrect FROM DATE of the repayment remark (928), causing duplicate posting of the transaction. Problem was noted 26 June 1987 and is unresolved.

m. Period of Service (POS). GENERAL PROMOTION/REDUCTION ROUTINE (TTC G21) generated erroneous base pay remarks for member who was previously reduced in grade but whose grade was restored and who went over a period of service prior to the processing of RESTORE GRADE (TTC 320). Problem was noted 26 June 1987 and is unresolved.

n. Separation Pay. The pay code routine in OFFICER SEPARATION PAY (TTC 535) failed to acknowledge the 701 pay code of zeroes and erroneously generated a credit remark (926) with the pay code of an enlisted reservist. Problem was noted 22 May 1987 and is unresolved.

o. Selective Reenlistment Bonus (SRB). U&E COMPUTE AND FORECAST MODULE (TTC U04) failed to acknowledge and forecast SRB installments reported by TTC 586 (Credit of SRB). Problem was noted 30 June 1987 and is unresolved.

p. Servicemens' Group Life Insurance (SGLI). U&E COMPUTE ROUTINE (TTC U04) erroneously generated deduction of SGLI as a daily rate for a period of lost time which was reported retroactively. Problem was noted 13 May 1987 and is unresolved.

q. State Income Tax Withholding (SITW)

(1) U&E TAX Module (TTC UAC) failed to consider state wages and state tax withheld in the W-2 process for the month of discharge. Problem was noted 5 May 1987 and is unresolved.

(2) U&E TAX Module (TTC UAC) computed SITW incorrectly for the month of discharge for members who have an alternate tax plan. Problem was noted 12 May 1987 and is unresolved.

r. Veterans Educational Assistance Program (VEAP). The VEAP magnetic tape produced out of mid-month update and extract (U&E) to report deductions to the Veteran's Administration is erroneously reflecting dollars and cents. All amounts deducted are even dollar amounts. Problem was noted 25 June 1987 and was corrected 30 June 1987.

s. Variable Housing Allowance (VHA). GENERAL PROMOTION REDUCTION ROUTINE (TTC G21) failed to post a TO DATE to both open VHA remarks (901) for member's stationed in Hawaii that had two open remarks on effective date of promotion or reduction. Problem was noted 12 June 1987 and is unresolved.

LIST OF REFERENCES

1. U.S. General Accounting Office, The Marine Corps Military Pay System: Too Many Errors And Inefficiencies, FGMSD-80-49, 10 June 1980.
2. Commanding Officer, Marine Corps Finance Center letter 5200/4 DAPS-4 to Commandant of the Marine Corps (FDF), Subject: Department of the Navy Annual System Manager/User Review, 15 July 1987.
3. Anthony, R. N. and Young, D. W., Management Control in Nonprofit Organizations, 3rd ed., Richard D. Irwin, 1984.
4. Webster's New World Dictionary, Second Concise Edition, Simon and Schuster, 1982.
5. Interview with Mr. E. T. Comstock, Fiscal Director of the Marine Corps, Headquarters, U. S. Marine Corps, Washington, D. C., 15 September 1987.
6. Marine Corps Manual, par. 1204.1.
7. Marine Corps Order 7220.44, Marine Corps Policy for Paying Marines Under the Joint Uniform Military Pay System/Manpower Management System (JUMPS/MMS), 20 September 1982.
8. Lawler, E. E. III, Nadler, D. A., and Cammann, C., Organizational Assessment, John Wiley & Sons, 1980.
9. Mock, T. J. and Grove, H. D., Measurement, Accounting, and Organizational Information, John Wiley & Sons, 1979.
10. Moses, D., Semantic, Pragmatic, Systemic Aspects of Measurement, Naval Postgraduate School Working Paper No. 86-12, May 1986.
11. Euske, K. J., Management Control: Planning, Control, Measurement, and Evaluation, Addison-Wesley Publishing Company, 1984.
12. Van de Ven, A. H. and Ferry, D. L., Measuring and Assessing Organizations, John Wiley & Sons, 1980.
13. Vroom, V. H., Work and Motivation, Wiley, 1964.

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